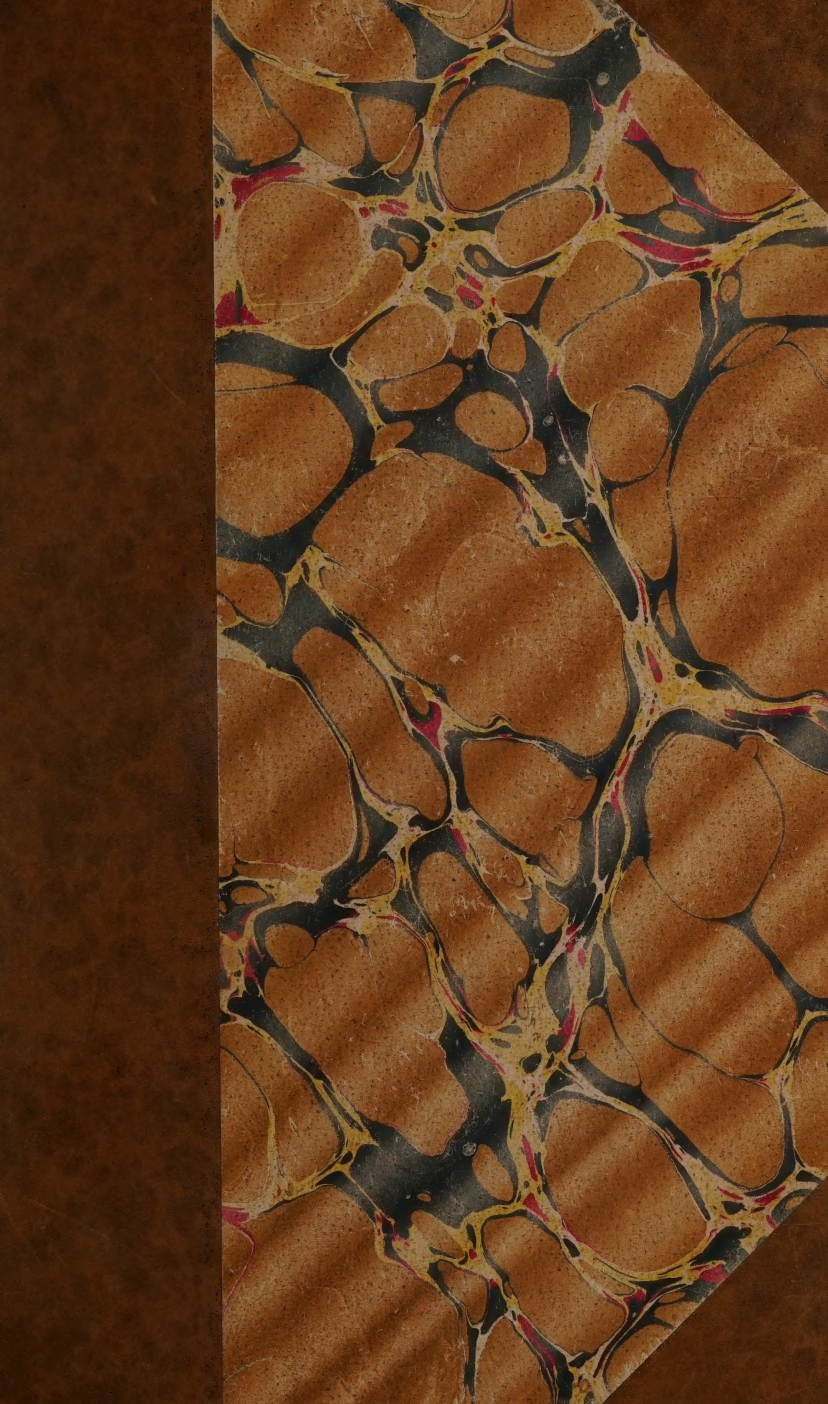

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pp192 and 193 wanting

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THE DISEASES OF WOMEN with Child, And in Child-Bed:

As also, The best Means of helping them in Natural and Unnatural LABOURS.

With fit Remedies for the several Indispositions of New-born Babes.

To which is prefix'd an exact Description of the Parts of *Generation* in Women.

A Work much more perfect than any now extant, and very necessary for all, especially Midwives and Men practising that Art.

The Sixth Edition Corrected, and augmented with several new Figures, and with the Description of an excellent Instrument to bring a Child that comes right; All correctly Engraven in Copper.

Written in *French* by *Francis Mauriceau*.
And Translated by *Hugh Chamberlen*, M. D.

London, Printed for *A. Bell*, at the Cross-keys and Bible in *Cornhill*, near *Stocks-market*. 1718.

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THere's preparing for the Preſs a Tranſlation of the remaining Works of *Mauriceau*, viz. his Aphoriſms, which contain the chief Precepts of the Art of Midwifery, and his Obſervations on Womens Diſeaſes, and all ſorts of Deliveries. To which will be added, a very correct Deſcription of the Organs of Generation in Women, with Figures as big as the Life, from whence they are drawn and engraven by a great Maſter.

The AUTHOR's Epistle Dedicatory.

To all my dear Brethren, the Sworn Master-Chirurgeons of the City of Paris.

GENTLEMEN,

WAnting a firm and solid Prop for the Weakness of my Conceptions, I will imitate the Generality of Authors, who chuse the Protection of some credible Persons, under whose Names to publish their Works to the World: But I'll not follow the Custom of those who dedicate them for the most part to Persons wholly ignorant of the Matter treated on, from no other Inducement but a mercenary Recompence. This, *Gentlemen*, obliges me to address my self to you, as the only fit Judges of it, and to offer you the first Fruits of my Labours, which might run the hazard of being gnawed by the Worm of Envy, if not put into your Hands for Protection. I offer it in Acknowledgment of the Honour you conferr'd on me, when some time since you receiv'd me into your famous Company; and to acquit my self of the Obligation I owed you: For, being a Member of your Body, all my Pains ought to be for you. This is the reason I could

not preſent it to any other, without being guilty of a domeſtick Larciny. By giving it you, I am liberal of your proper Goods; or rather, I render you an Account only of the Talent you entruſted me with to improve: I mean, the true Precepts of this noble Art of *Chirurgery*, of which you have a Knowledge and Experience ſo perfect, that every one is obliged openly to confeſs, that of you alone, amongſt all the Chirurgeons of *Europe*, it may be juſtly ſaid, *Vos Sol, alios umbra regit.*

I ſhall refrain, Gentlemen, the praiſing you upon this Subject, for (beſides it's deſerving a Pen more able than mine, to acquit it ſelf according to your Merits) I fear, I ſhould be ſilenc'd for my ſo doing, by ſuch as would alledge, that with which he once was reproached, who undertook to praiſe *Hercules*, by publiſhing his Heroick Actions to the People of *Lacedemonia: Who* (anſwer'd one) *does not know him? and eſteem him to be in the Number of the immortal Gods?* So likewiſe may it be ſaid to me; Who knoweth not the Maſter-Chirurgeons of *Paris?* Is it not manifeſt that you are that fruitful Spring, to which they come from all Places of *Europe*, to draw the Perfection of ſo fair an Art? And whither many foreign Princes and Princeſſes are obliged to have Recourſe, for the Preſervation and Recovery of their Health, which they believe cannot be obtained ſo eaſily, and with ſo much Aſſurance from any other, as from you? Is it not known likewiſe, that our Mo-

Monarch has theſe many Years entruſted wholly his Perſon into his Hands, who is at preſent the Head of your illuſtrious Body? Neither can it be forgot, that he did, through his Fatherly Goodneſs for the Preſervation of the Nobility that accompany'd him the laſt Year in his Conqueſts in *Flanders*, command three or four of you to ſtanch the Blood ſpilt before that mighty City *de L' Iſle*, which he brought under his Obedience? Did it not then appear, that divers Perſons of great Quality (mortally wounded in ſignalizing themſelves at the Attack of that ſtrong Place) ſeem'd wholly reviv'd at the inſtant they received the News of theſe excellent Chirurgeons Arrival, being confident of receiving from them ſpeedy and certain Help? One might at the ſame time perceive the Generoſity of others extraordinarily augmented by the Confidence of being in their ſafe Hands: Let us therefore treat no longer of what none are ignorant; but rather make ſome few Reflections on the Charity (which renders you every where ſo famous) in aſſiſting *gratis* with your ſage and prudent Counſels an Infinity of Sick, who meet from all Parts at *St. Come*, the firſt *Munday* of every Month in the Year, to conſult you upon many Diſeaſes, to all others (except you) incurable; deſpairing of a Cure for their Maladies if it deſcends not from your famous Magazine. This Charity alſo plainly appears in the Inſtruction you beſtow *gratis* upon Students in Chirurgery, appointing ſome

amongst you, to make them Demonstrations in Anatomy, and teach them the true Method of well performing all the Operations of Chirurgery; of which Commission I have had the Honour to acquit my self, as well as 'twas possible for me, three Years, in pursuance of an Order from you to that purpose. But tho' in those Exercises, so ordered by you, we discourse not usually of Women with Child, nor of their different Labours; yet thinking to discharge my self entirely of my Duty, I hope you will not judge amiss of my publishing this Book to the World, which I present to you; in which I endeavour to demonstrate exactly the means of remedying many Indispositions of Women with Child, and in Child-bed, with an exact Method of well practising the Art of Midwifery, being perswaded it may be very profitable to young Chirurgeons living in the Country, where but few sufficiently instructed in all things necessary to be known, can be met with; I have the rather undertaken this, that Midwives may find therein what they ought to know, the better to exercise their Art, and undergo the Examination, at present obliged to before you for their Reception: I hope likewise, *Gentlemen*, you will have the Goodness to excuse it, though not in so fair a Form as the Matter requires, and though I express not the Contents so perfectly as you conceive them; for I have (I confess with a little too much Confidence) undertaken to open divers Secrets of Nature,

Nature, which (being abſtruſe, and difficult to be comprehended) create yet greater Trouble to explain them ſignificantly, ſo as to be well underſtood: Notwithſtanding, as a dark Body reflects the Light it receives, ſo, I hope, this ſmall Work may (by the Reflection of the Sun of your Doctrine, of which I have received many Rays) enlighten the young Chirurgeons and Midwives in the Difficulties they often meet with at Labours.

Accept then, *Gentlemen*, this ſmall Production of one of your Children, who conjures you, by the Love of Fathers, (that never diſown their Children, how deformed ſoever) to defend it againſt Envy and Detraction, which will never dare to attack it, when vouchſafed your Protection; which is the Favour deſired by,

GENTLEMEN,

Your very affectionate Brother,

and Companion,

Francis Mauriceau.

THE AUTHOR TO THE READER.

Friendly Reader,

Since in the Age we live, we see most People govern'd rather by *Opinion* than *Judgment*, I desire (if you mean to profit by my Book) you will read and examine it without *Critical Envy*, free from all *Preoccupation*, that may obscure your Judgment, and hinder your acknowledging the Truth of what I pretend to teach. Therefore follow not such as *condemn a Conception* when they *understand it not*; and believe it *false*, because 'tis *new*; neither imitate those who seeking only to carp at *Words*, neglect the *Sense* of the Discourse: For, even as it often happens that *Purging*, tho' proper for a Disease, doth a Patient no Good, when his Body is not well prepared, and disposed for its Operation: So the *Doctrine* of Books (one of the most wholesome effectual Remedies to *chase* away *Ignorance*) is wholly useless to Mens Wits, when not

not disposed to receive it. I believe I may expect your granting me this Request, it being for your Advantage: Mean while, tho' I design to instruct you here in whatever concerns *Women with Child*, or *in Labour*, yet I would not hinder your reading other learned Authors who treat of it, but only acquaint you that the most part of them (having never practised what they undertake to teach) resemble (in my Opinion) those *Geographers*, who give us the Description of Countries they never saw, and (as they imagine) a perfect Account of them; but which makes it difficult (not to say impossible) they should ever obtain their End: For 'tis certain (as *Plutarch* well noted) that the *speculative* Part of Arts is improfitable, and unfruitful, without the Practice. You may then, as to this Subject, rely on my Method, since to conduct you in it, I faithfully recite what I have with happy Success observed for many Years in the *Practice of Deliveries*.

Furthermore, blame me not for differing from the common Opinion of many; for I declare I have bound my self to acquaint you with the Truth, of which, I hope, you will have more Satisfaction, than had I always blindly followed the Thoughts of others; having likewise endeavoured, not to run out in superfluous Discourse, that I might be more intelligible to young *Chirurgeons* and *Midwives*, to whom this Book (if I mistake not) will be as useful as any, to teach the safe Practice

of

of Deliveries. I have not ſtuft it with long Receipts, that only ſwell a Volumn, and confound their Wits in the uncertain Choice of ſuch different Remedies, compoſed of Drugs that often are unknown to them; but content my ſelf to teach them the beſt, chiefly ſuch as we ordinarily uſe in our Practice. But if in all this you find ſome of my Sentiments not ſo Satisfactory, or others (in your Opinion) not fully agreeing with Truth; remember, that as among the beſt Corn, there ſpring Tares, or other Weeds; ſo you meet with few Books ſo clear, as not to reject ſomething in them; and if I hope for Reſpect from you in recompence of my Pains, it may be but what you may have had for others, who never had, on this Occaſion, a greater Deſire than my ſelf to ſerve you.

F. M.

The

The Approbation of the four Sworn Provoſts and Wardens of the Maſter-Chirurgeons of Paris.

WE under-written, Sworn Provoſts and Wardens of the Maſter-Chirurgeons of the City of *Paris*, do certify, that we have ſeen and examined a Book, compoſed by *FRANCIS MAURICEAU*, ſworn Maſter-Chirurgeon of *Paris*, intituled, *The Diſeaſes of Women with Child, and in Child-bed; With a true Method of aſſiſting them in their Natural Labours; and the Means of remedying all thoſe contrary to Nature; and the Diſeaſes of Infants Newborn. Likewiſe an exact Deſcription of all the Parts of a Woman deſtin'd to Generation; together with many Figures ſuitable to the Subject.* Which Book We eſteem very profitable for the Publick, and neceſſary for young Chirurgeons, and all Midwives to learn perfectly the Practice of the Art of Deliveries: In Confirmation of which we have ſigned this preſent Certificate.

Le Filaſtre. *L' Eſcot.*
Vivien. *L' Eaulte.*

Paris, *March* 15, 1668.

An

An Extract of the King's Privilege.

BY the Grace and Privilege of the King, given at St *Germains* the 10*th* Day of *June*, 1668. ſigned *Le Croſs.* It is granted to *Francis Mauriceau*, ſworn Maſter-Chirurgeon of *Paris*, to print, ſell, and diſtribute, by ſuch Printers and Bookſellers as he ſhall think good, a Book compoſed by him, entituled, *The Diſeaſes of Women with Child, and in Child-bed*, &c. With expreſs Injunction and Prohibition to all Perſons of what Quality or Condition ſoever, not to print the ſaid Book; nor to ſell or vend any other Impreſſion than the ſaid *Mauriceau* hath cauſed to be made, or authoriſed; nor likewiſe to copy or counterfeit any of the Figures of the ſaid Book for the ſpace of Ten Years, commencing from the time the Impreſſion ſhall be compleated, upon pain of Confiſcation of the Counterfeit Copies, and 300 *l.* re-imburſing all Charges and Damages whatſoever, as is more amply recited in the ſaid Privilege, of which this preſent Extract ſhall ſerve for ſufficient notice.

The

The Translator to the Reader.

Courteous Reader;

HAving long observed the great Want of necessary Directions how to govern Women with Child, and in Child-bed, and also how new-born Babes should be well ordered, I designed a small Manual to that purpose; but meeting sometime after in France *with this Treatise of* Mauriceau, *(which, in my Opinion, far exceeds all former Authors, especially* Culpeper, Sharp, Speculum Matricis, Sermon, *&c. being less erroneous, and enriched with divers new Observations) I changed my Resolution into that of translating him; whom I need not much commend, because he is fortified with the Approbation of the Wardens of the Chirurgeons Company of* Paris.

His Anatomy *was in the first Edition omitted, but is in this; which with the Book I have carefully rendred into* English *for the Benefit of our Midwives; of whom many may yet very well admit of an additional Knowledge. The principal thing worthy their Observation in this Book, is, accurately to discover what is properly their Work, and when it is necessary to send for Advice and Assistance, that so, many Women and Children may be preserved, that now perish for want of seasonable help. My Author makes out the breaking of the right Waters, for the proper Season of a natural Delivery, and (when-ever a Child is not born then, or soon after) Nature is so much short of performing her Office. This is certainly a great Truth; and all wrong Births should never be longer delayed: And for the most part Floodings and Convulsions not so long, lest the Woman lose her Life before ever the Water breaks: But if no dangerous Accident intervene, in a right Labour, one may lengthen out their Expectation to twelve Hours after; and, tho' some may have been happily delivered 24. Hours, or two Days after, yet I should not advise any to run that hazard, provided they can have an expert Artist to deliver them,*

them, without destroying the Child; because many have perished in that Case; and it is not prudent to venture, where but one of many escapes: For the longer the Labour continues after the breaking of the Waters, the weaker both Woman and Child grow, and the drier her Body, which renders the Birth more difficult; and 'tis ever good taking Time by the Foretop.

And that Midwife's Skill is certainly the greatest, and she deserves most Commendation, who can soonest discover the Success of the Labour, and accordingly either wait with Patience, or timely send for Advice and Help. Nor can it be so great a Discredit to a Midwife (let some of them imagine what they please) to have a Woman or Child saved by a Man's Assistance, as to suffer either to die under her own Hand, altho delivered: For, that Midwife mistakes her Office, that thinks she hath performed it, by only laying the Woman; because her principal Duty is to take care that she and her Child be well, with Safety and convenient Speed parted; and, if this be impossible for her, and feasible by another, it will justify her better to wave her imaginary Reputation, and to send for Help to save the Woman and Child, than to let any perish, when possible to be prevented; as in the Case of my Author's Sister, in the 20th Chapter of the first Book. Yet, in Countries and Places, where Help and good Advice is not seasonably to be had, Midwives are compelled to do their best, as God shall enable them; which dangerous and uncertain Trials it doth not become them to put in practice upon Women, where no timely Assistance need be wanting. Most wrong Births, with or without Pain; all Floodings with Clods, tho' little or no Pain, whether at full time or not: All Convulsions, and many first Labours; and some others, tho' the Child be right, if little or no Pain, after the breaking of the Waters, and the Child's not following them in some six or ten Hours after, require the good Advice of, and, peradventure, speedy Delivery by expert Physicians in this Practice: For tho' a few may escape in these Cases, yet the far greater Number perish, if not aided by them. Let me therefore

advise

advise the good Women, not so readily to blame those Midwives who are not backward in dangerous Cases to desire Advice; lest it cost them dear, by discouraging, and forcing them to presume beyond their Knowledge or Strength, especially when too many are over-confident.

Those few things wherein I dissent from my Author, if of dangerous Consequence, are noted in the Margent; if not, are left to the Discretion of the Reader.

I confess he is often too prolix; a Fault which the French *much affect; however, I chose rather to translate him according to his own Stile, than contract him; and also to leave unaltered some things not very well expressed, being of small Moment. I find also he distinguishes not between the Words* Plaister *and* Ointment, *but uses them promiscuously one for the other.*

In the 17th *Chapter of the second Book, my Author justifies the fastning Hooks in the Head of a Child that comes right, and yet because of some Difficulty or Disproportion, cannot pass; which I confess has been, and is yet the Practice of the most expert Artists in Midwifery, not only in* England, *but throughout* Europe; *and has much caused the Report, That* where a Man comes, one or both must necessarily die; *and is the reason of forbearing to send, till the Child is dead, or the Mother dying. But I can neither approve of that Practice, nor those Delays; because my Father, Brothers, and my Self [tho' none else in* Europe *as I know] have, by God's Blessing, and our Industry, attained to, and long practised a way to deliver Women in this Case, without any Prejudice to them or their Infants; tho' all others (being obliged, for want of such an Expedient, to use the common way) do, and must endanger, if not destroy one or both with Hooks. By this manual Operation a Labour may be dispatched, (on the least Difficulty) with fewer Pains, and sooner, to the great Advantage, and without Danger, both of Woman and Child. If therefore the use of Hooks by Physicians and Chirurgeons, be condemned, (without thereto neeessitated through some monstrous Birth) we can much less approve*

prove of a Midwife's using them, as some here in England *boast they do; which rash Presumption, in* France, *would call them in Question for their Lives.*

In the 15th Chapter of this Book, my Author proposes the conveying sharp Instruments into the Womb, to extract a Head; which is a dangerous Operation, and may be much better done by our forementioned Art, as also the Inconvenience and Hazard of a Child dying thereby prevented, which he supposes in the 27th Chapter of this second Book.

I will now take leave to offer an Apology for not publishing the Secret I mention we have to extract Children without Hooks, where other Artists use them, viz. *there being my Father and two Brothers living, that practise this Art, I cannot esteem it my own to dispose of, nor publish it without Injury to them; and think I have not been unserviceable to my Country, altho' I do but inform them that the forementioned three Persons of our Family, and my Self, can serve them in these Extremities, with greater Safety than others.*

I design not this Work to encourage any to practise by it, who were not bred up to it; for it will hardly make a Midwife, tho' it may easily mend a bad one. Notwithstanding, I recommend it to the Perusal of all such Women as are careful of their own and their Friends Safeties, there being many things in it worth their noting: And designing it chiefly for the Female Sex, I have not troubled my self to oppose or comment upon any Physical or Philosophical Position my Author proposes. I hope no good Midwives will blame me or my Author for reprehending the Fault of bad ones, who are only aimed at, and admonished in this Work; and I am confident none but the Guilty *will be concerned, and take it to themselves, which I desire they may, and amend. Farewell.*

From my House in *Essex-Buildings.* Hugh Chamberlen.

A N

AN Anatomical Treatise OF THE PARTS of a Woman destin'd to GENERATION.

SInce what *Hippocrates* very well notes in his Book of *Humane Parts*, (that the Womb [*immediately, tho' not remotely*] causeth most Diseases in Women) is not to be doubted, I think it not amiss to premise, not only a Description of the Womb, but also of every Part destin'd to Generation in a Woman: And (according to *Fernelius*'s Example, who forbad the Ignorant in Anatomy to read his Works) I affirm, that 'tis impossible truly to apprehend what hereafter I pretend to teach, if these Parts be not perfectly understood. I intend to be as brief upon them as I can, that Midwives may the easier reap the Benefit, (being unwilling to confound them with a multitude of Anatomical Controversies, for their sakes here omitted, as wholly unprofitable to them); however, the Description I give, tho' succinct, shall be so exact, that joined with the Figures wherein they are represented, will sufficiently inform them how to behave themselves in the Art of Deliveries.

These Parts are the Spermatick Vessels; as well preparing, as deferent or ejaculatory, the Testicles and the Womb, with divers others depending on them, which shall be particularly examined; and first, the Spermatick Vessels, called *Preparing*.

An Explication of the first Figure; which demonstrates the Original and Distribution of the Spermatick Vessels.

A. A. A. A. *Shew the Muscles of the Belly, and the* Peritonæum, *turning outwards, to show the Parts which follow.*

a. a. *The Liver.*

b. *The Umbilical Vein.*

c. *The suspending Ligament of the Liver.*

d. *The Bladder of the Gall.*

e. *The* Vena Cava.

f. *The Great Artery.*

g. g. g. g. *The emulgent Veins and Arteries.*

h. h. *The Reins.*

i. i. *The Spermatick Veins, of which the right riseth out of the Trunk of the* Vena Cava; *and the left proceeds from the Emulgent.*

k. k. *The two Spermatick Arteries, which arise out of the great Artery, and passing on, join with the Veins of each side.*

l. l. *Two Branches of the Spermatick Vessels, which descend towards the Sides of the Womb; where each divides its self into three Branches more: Of which the first tends to the Bottom of the Womb: The second distributes it self through the whole large Ligament: And the third is conducted along the side of the Womb, and terminates towards the Neck of it, near the inward Orifice.*

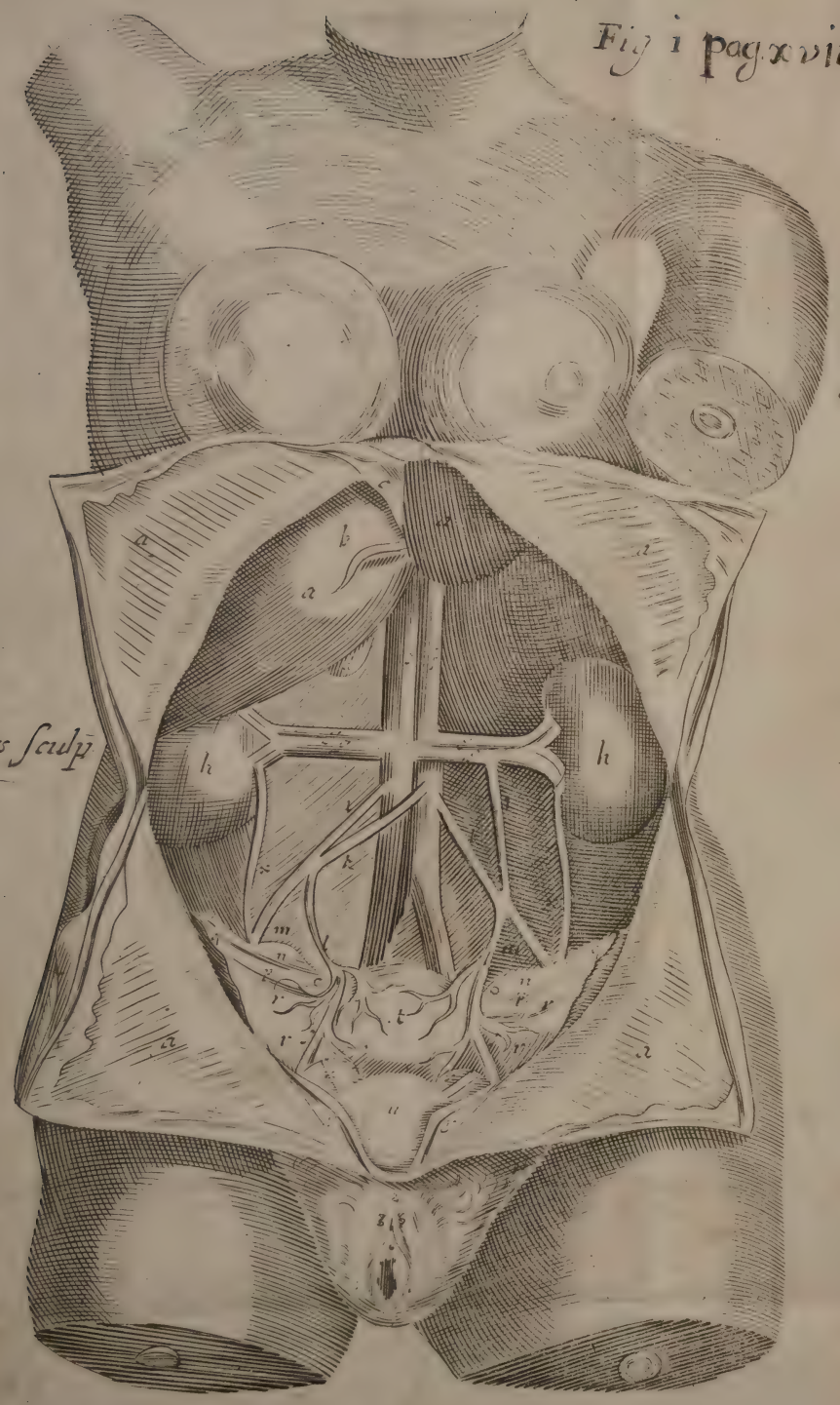
m. m. *The Spermatick Veins and Arteries; which being joined together, go on to the Testicles.*

n. n. *The Testicles.*

o. o. *The Ejaculatory Vessels, which go streight from the Testicles to the Womb.*

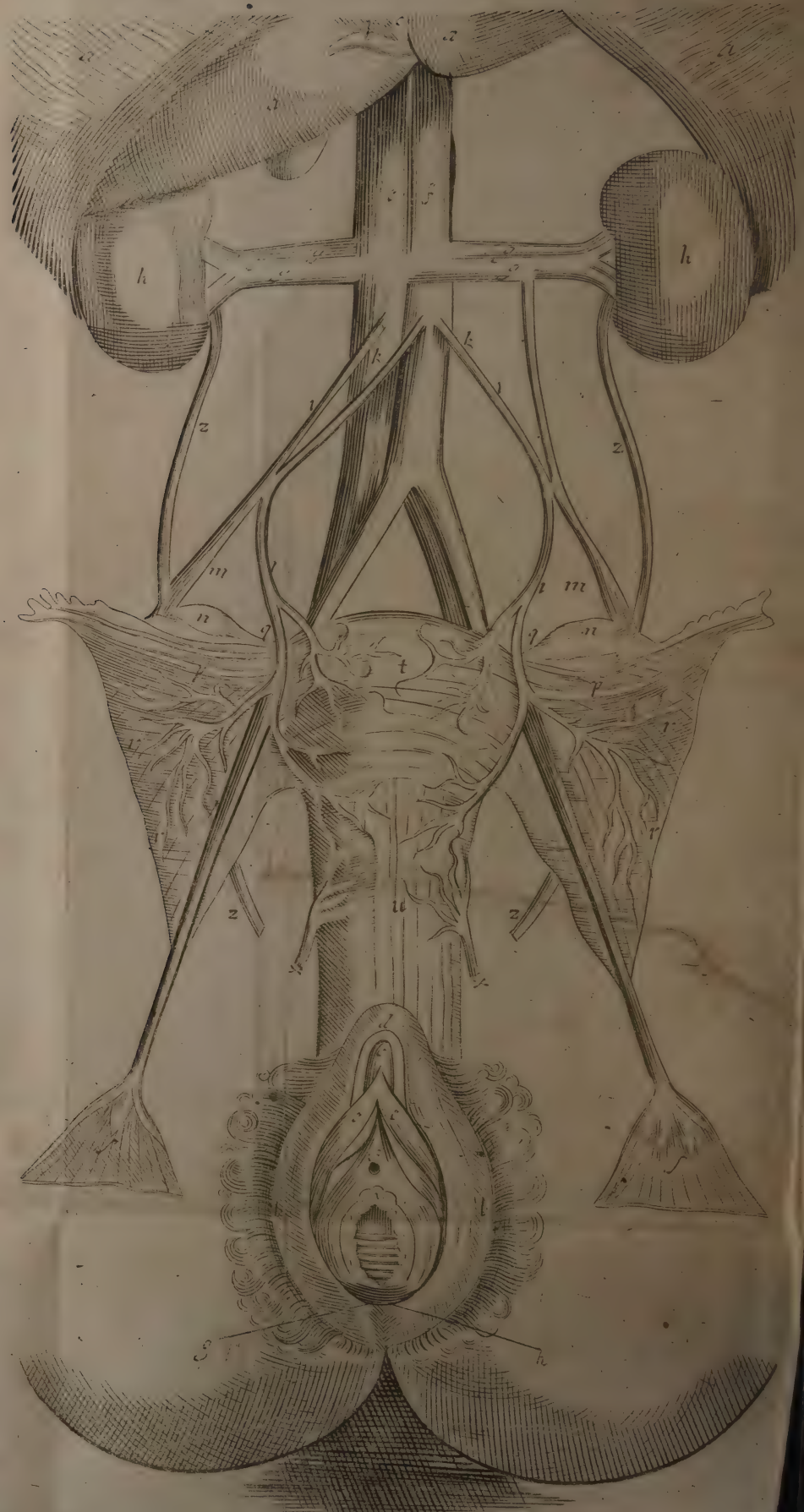
p. p. *The*

Fig i pag. xviii.



Holmes sculp

Fig ii pag. xviii.



p. p. *The Veſſels which are uſually taken for the true Ejaculatories, and therefore called by* Fallopius, Trumpets.

q. q. *The ragged Piece, which is nothing elſe but the Production of the broad Ligament, appearing ragged at the ends.*

r. r. r. r. *The broad Ligaments.*

ſ. ſ. *The round Ligaments.*

t. *The Womb.*

u. *The Bladder.*

x. x. x. x. *The Ureters inſerted behind the Bladder.*

y. y. *The* Os Pubis, *ſeparated and divided one part from the other, that the Situation of the Bladder may be the better diſcerned, being placed upon or above the Womb.*

1. 1. *The two great Lips of the Privy Parts, a little dilated one from the other.*

2. *The* Clitoris.

3. 3. *The two* Nymphæ, *between which appears the Paſſage of the Urine; and a little lower may be ſeen ſome Sign of the* Caruncles, *round the Entry of the* Vagina.

An Explication of the ſecond Figure, repreſenting the ſame Parts as the firſt; but in this the Parts are greater, and wholly ſeparated from the Body, that they may be better and eaſier conſidered; together with the whole Womb and its Ligaments, that the Diſtribution of the Veſſels may be the more exactly obſerved.

A. A. *Sheweth the Muſcles of the Belly, and the* Peritonæum *turned upwards.*

a. a. *The Liver.*

b. *The Umbilical Vein.*

c. *A ſmall Portion of the ſuſpending Ligament of the Liver.*

d. *The Bladder or Veſſel of the Gall.*

e. *The* Vena Cava.

f. *The Great Artery.*

g. g. g. g. *The emulgent Veins and Arteries.*

h. h. *The Kidneys.*

i. i. *The Spermatick Veins, of which the right riseth out of the Trunk of the* Vena Cava, *and the left proceeds from the Emulgent.*

k. k. *The two Spermatick Arteries, both which spring from the Trunk of the great Artery, and then join in the middle of their Progress with the Veins of each side.*

l. l. *Two Branches of the Spermatick Vessels, which descend towards the Sides of the Womb, where they divide themselves into three Branches; of which the first renders it self at the Bottom of the Womb; the second is distributed through the whole broad Ligament; and the third is conducted along the Sides of the Womb towards the Neck, where it terminates near the inward Orifice.*

m. m. *The Spermatick Veins and Arteries, which being joined together, go on to the Testicles.*

n. n. *The Testicles.*

o. o. *The Ejaculatory Vessels, which pass from the Testicles streight to the Womb.*

p. p. *The Vessels, usually taken for the true Ejaculatories, which render themselves at the Horns of the Womb, and are those to which* Fallopius *gave the Name of* Trumpets.

q. q. *The ragged Piece, which is only a Production of the large Ligament, which appears jagged at the end.*

r. r. r. r. *The large or broad Ligament.*

f. f. f. f. f. f. *The round Ligaments, continued from the Horns of the Womb to the* Os Pubis, *and the upper Parts of the Thighs, where they are fastned by a membranous Production.*

t. *The proper Body of the Womb.*

u. *The* Vagina, *or Neck of the Womb.*

x. *Two Branchings of Veins and Arteries, which taking their Rise from the* Hypogastricks, *pass upwards from below, sprinkling all the Neck of the Womb, and terminate where they meet the Branches of the Spermaticks descending.*

z. z. z. z. *The Ureters.*

a. *Shows*

a. *Shows the* Pubis, *garniſhed with Hair.*
b. b. *The two great Lips ſtretched aſunder; likewiſe on the outſide covered with Hair, but not within.*
c. *The* Clitoris.
d. *The covering of the* Clitoris, *reſembling almoſt the* Præputium, *or Foreskin.*
e. e. *The* Nymphes.
f. *The Paſſage of the Urine.*
g. *The Fork.*
h. *The Navicular Ditch.*
i. i. i. i. i. *The Caruncles* Myrtiformes, *between which appears the* Vagina, *in the Obſcurity whereof may be obſerved ſome Wrinkles.*
k. *The* Anus *or Fundament.*

CHAP. I.

Of the Preparing Veſſels.

THE Spermatick Veſſels in Women, called *Preparing*, becauſe they prepare and convey to the Teſticles the Blood, of which Seed is engendred, differ not from thoſe in Men, either in number, riſe, or uſe, but only in their Inſertion, and manner of their Diſtribution; for they, as theſe, have two Veins and two Arteries, ariſing from the ſame Places, and doing the ſame Work.

Theſe Veſſels are two on each Side, to wit, a Vein and Artery; the Vein on the right ſide ariſeth out of the Trunk of the *Vena Cava*, and that on the left comes ever from the Emulgent: As to the Arteries, they both ſpring from the great Artery under the Emulgents. The Vein and Artery being ſufficiently diſtant in their Riſe, join about the middle of their Progreſs, that ſo they may paſs together to the Teſticle; but before they arrive, they produce a very

considerable Branch, descending along the side of the Womb, where they separate into three Branches; of which, the first is conducted towards the Bottom of the *Matrix* for the discharging of the Terms, when a Woman is not with Child, and for Nourishment of the *Fœtus* in the Womb: The second is distributed throughout the Membrane of the broad Ligament, sparing also some small Sions to the round Ligament: And the third Branch slides along the side of the Womb, and terminates towards its Neck for to discharge the Terms, when a Woman is with Child. The other Portion of the Spermatick Vessels goeth wholly to the Testicles, and approaching the Vein and Artery, are so joined, that they appear to be but one only Vessel, and are then so intermixed, that they can hardly be separated from each other without breaking; which is so ordered (if we believe the vulgar Opinion) that the Blood may the easier receive in that labyrinthick Passage, a Disposition to be converted into Seed by the Testicles, before it comes to them.

CHAP. II.

Of the Testicles.

EVery Woman hath two Testicles as well as Men, being also for the same use, which is to convert into fruitful Seed the Blood that is brought to them by the Preparing Vessels, of which we have lately discoursed; but they differ from those of Men in Situation, Figure, Magnitude, Substance, Temperature, and Composition, Womens Testicles are situated within the Belly towards each side of the Womb, distant from its Horns, about an Inch or thereabouts: They are thus situated to augment their Heat, and they are there kept firm, by the Means of the broad Ligaments,

ments, to the Membranes of which they are ſtrongly faſtned, near where they receive the Preparing Veſſels. Their Figure ſhows us, they are not ſo round as Mens, nor ſo big, being ſmaller, and in ſome faſhion flatter, both before and behind. Their Subſtance ſeems not ſo ſoft, but a little more firm, only from the Hardneſs of their Membrane; and as the Temperament of Women is much more cold and moiſt than of Men, ſo the Heat of their Teſticles is weaker. Their Compoſition is alſo very different, being covered but with a ſingle * Membrane or Tunicle, and their Body is compoſed of many ſmall Kernels, and † a ſmall Bladder joined together full of Seed, much more wateriſh than Mens, neither have they any ‖ *Epidigme.* Now the Womens Seed being elaborated and perfected in their Teſticles, and having there received its prolifick Virtue, is carried into the ejaculatory Veſſels, after the manner we are going to deſcribe.

* *Saving where the Preparing Veſſels enter them.*

† *By ſome called the* Ovarium.

‖ *A covering of the Teſticles, not unlike a ſmall Teſticle.*

[*Our Author lying under a Miſtake, in his Notions concerning the Teſticles in this, and* Vaſa Deferentia *in the following Chapter, I ſhall here give my Sentiments of both.*

" We find that the Teſticles of a Woman are no " more than as it were, two Cluſters of Eggs, which " lie there to be impregnated by the ſpirituous Parti- " cles, or animating *Effluviums*, conveyed out of the " Womb through the two Tubes, called by our Author " *Deferent Veſſels.* And as he is miſtaken in the Teſti- " cles, ſo is he likewiſe in an Error in his Acceptation " of the Woman's Seed: For indeed there is none ſent " forth by the ejaculatory Veſſels (by us called *Fallo-* " *pius's Tubes)* in Coition, there being no Seeds in the " *Ovaria*, or Teſticles: But ſome Days after the Im- " pregnation of the Egg, or Eggs, as in Twins, they

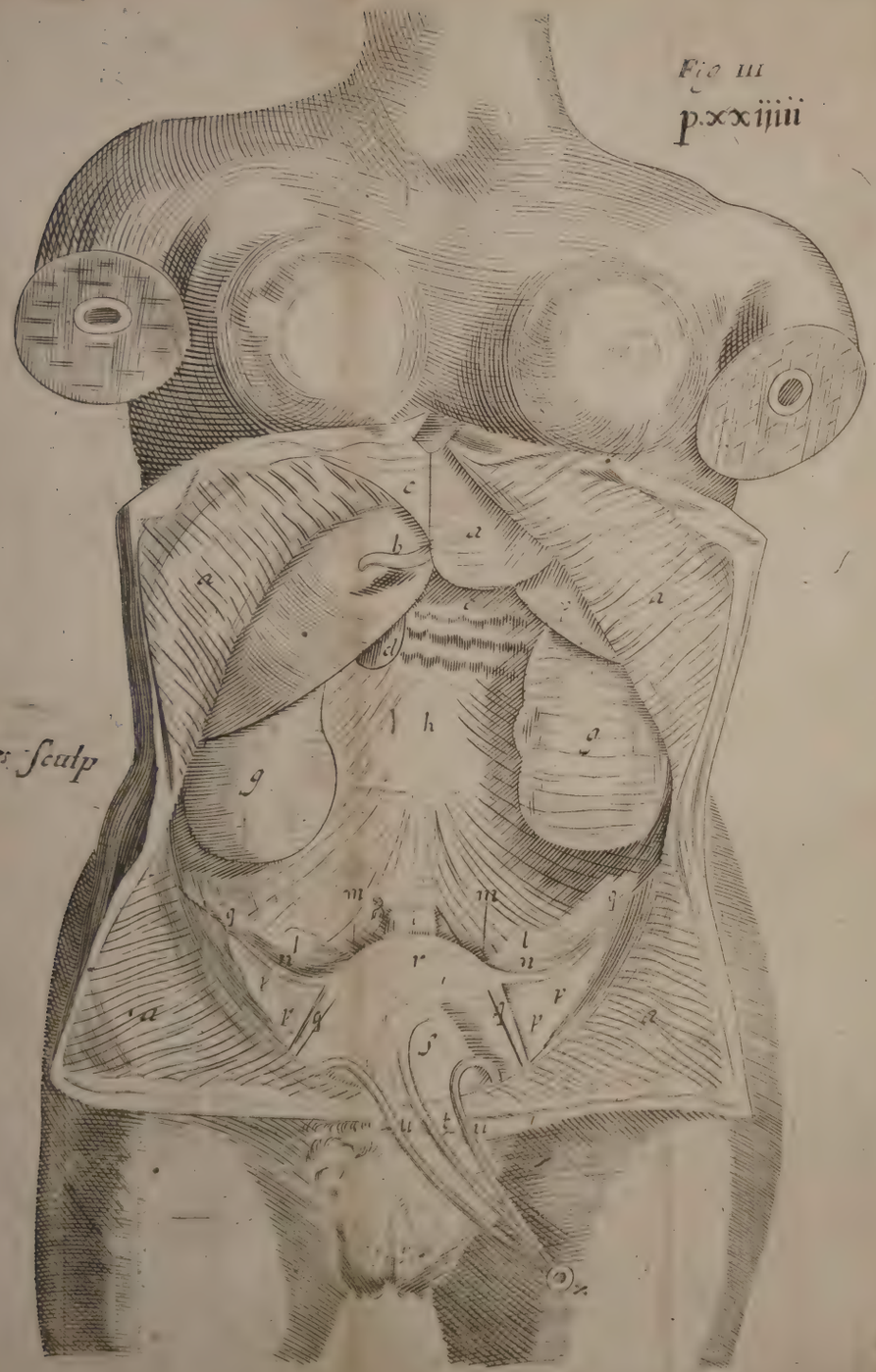
" decide through those two Tubes into the Womb, " where being placed, the *Embrio* takes up its quar- " ters.]

CHAP. III.

Of the Deferent Vessels, otherwise called Ejaculatory.

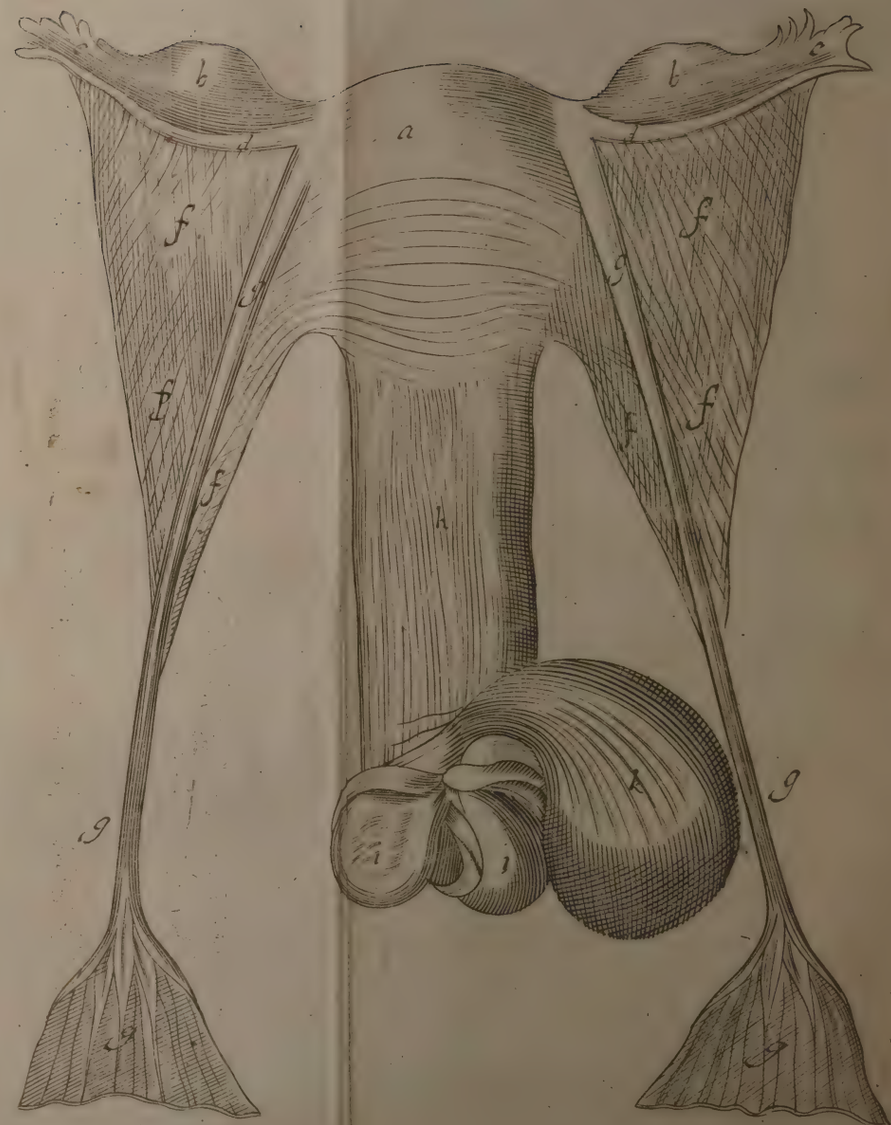
THese Vessels are two, fastned in their whole Extent by a membranous Appendix to the broad Ligament of the Womb: Nor do they proceed from the Testicles as in Men, but are distant from them, a Fingers breadth at least, which causeth them not to suck or receive from them the Seed, but by small Conduits almost imperceptible; which being disposed after the manner of the Mesaraick Veins, are trained along this membranous Distance, between the Deferent Vessels and the Testicles. Their Substance is, as it were, nervous, and moderately hard; they are round, hollow, big, and broad enough at their end, joining to the Horn of the Womb, which makes *Fallopius* call them *Trumpets*, because they somewhat resemble the streight Trumpet where-with Fame is usually pictured; for from a narrow End, it waxeth by degrees larger, till the other is inserted in the Sides of the Womb; whereas *Laurentius* assures us, he hath often observed them separated into two Conduits, one more large and short, and opens it self into the side of the Bottom of the Womb; and the other being narrower and longer, terminates in the Beginning of its Neck, near the inner Orifice. He saith further, That the Women discharge their Seed by the first into the Bottom of the Womb, when not with Child, which they cannot do but by the second when they

Fig iii
p.xxiiiii



Helmes sculp

Fig iiii p.xxvi.



they are; foraſmuch as after Conception the inward Orifice is exactly cloſe: Whence, according to his Opinion, big-bellied Women find more Pleaſure in Coition than others, becauſe the Seed is then diſcharged by a longer Paſſage. Every one (if he pleaſeth) may conſider this Subject further, the better to be informed of the Truth of it. The other Extremity of the Deferent Veſſels, is not viſibly hollow, but reſembling almoſt the Appendix of the blind Gut; nor is it faſtned to any part, but is wavering and flowing from one ſide to the other, and alſo ſmaller, more fluctuating and winding than the other, to the end that the Shortneſs of the way might be recompenſed by thoſe little Windings. There may be likewiſe ſeen in the ſame place, four or five ſmall membranous Productions, likewiſe flabby and ragged, as if they had been gnawed by Worms.

This is all's to be ſaid of theſe Deferent Veſſels, which ſerve (according to common Opinion) for Pores to the Seed, and to diſcharge it into the Womb: Yet their Riſe makes me doubt of this uſe, becauſe they do not derive it from the Teſticle, not touching it in the leaſt; but do much rather believe, that the Women diſcharge it uſually by another Veſſel, coming directly from the Teſticle to the ſide of the Womb, near its Horn; which, in Truth, ſeems not manifeſtly hollow, tho' big enough; neither is it neceſſary it ſhould be ſo, becauſe the Seed being very ſpirituous, may eaſily paſs through its porous Subſtance. Now we come to the Deſcription of the Womb, and of each part belonging to it.

The Explication of the third Figure, which repreſents the natural Situation of the Womb.

A. A. A. A. *Shew the Muſcles of the Belly, and the* Peritonæum *turned outwards.*

a. a. *The*

a. a. *The Liver.*
b. *The Umbilical Vein.*
c. *The ſuſpending Ligament of the Liver.*
d. *The Bladder of the Gall.*
e. *The* Pancreas, *or Sweet-bread.*
f. *Part of the Spleen.*
g. g. *The Reins.*
h. *The Place where the* Meſentary *was faſtned.*
i. *The right Gut.*
l. l. *The Teſticles.*
m. m. *The Ejaculatory Veſſels, which come immediately from the Teſticles to the Womb.*
n. n. *The Veſſels, ordinarily taken for the true Ejaculatories.*
o. o. *A Production of the broad Ligamen, which ſeems to be ragged.*
p. p. p. p. *The broad Ligaments.*
q. q. *The round Ligaments.*
r. *The Womb.*
ſ. *The Bladder.*
t. *The* Urachus, *by which the Urine of the Child paſſeth into the Bladder of the Mother.*
u. u. *The Umbilical Arteries.*
x. *The Navel, where is faſtned the two Umbilical Arteries, and the* Urachus, *with which the Umbilical Vein ſerves only after the Birth for Suſpenſors for the Bladder and Liver.*
y. y. *The two great Lips of the Privy Parts, between which appears the great Crevice or Notch.*

Explication of the Fourth Figure, which repreſents the ſame Parts as the Third, but in this the Womb is repreſented entire, and ſeparated from the Body, with its four Ligaments, and the Bladder.

a. *Shows the proper Body of the Womb.*
b. b. *The Teſticles.*
c. c. *The Ejaculatory Veſſels, which go ſtreight from the Teſticles to the Womb.*

d. d.

d. d. *The Veſſels taken by many for the only true Ejaculatories, deſcribed by* Fallopius, *under the Name of* Trumpets.

e. e. *The ragged piece, which is nothing but a Production or Extenſion of the broad Ligament, appearing ragged at the Ends, as if gnawn with Worms.*

f. f. f. f. f. f. *The broad Ligaments.*

g. g. g. g. g. g. *The round Ligaments, continued from the Horns of the Womb, to the* Os Pubis, *or Share-bone, and the upper Parts of the Thighs, where they are faſtened by a membranous Production.*

h. *The* Vagina, *or Neck of the Womb.*

i. i. *The two Lips of the Privy-Parts.*

k. *The Bladder, which being emptied, appears ſmall and wrinkled, as it is deſcribed in this Figure.*

l. *The Neck of the Bladder, which being very ſhort in Women, is faſtned above the Entry of the Neck of the Womb.*

CHAP. IV.

Of the Womb in general.

THE Spermatick Veſſels and Teſticles of Women, above-mentioned, were only made for the ſake of the Womb, which is the proper place (as the Earth) appointed to receive the Seed, by *(a)* them prepared and perfected for it; and being there received, ſerves, together with the Man's, for the Generation of a *Fœtus*. We may, with good reaſon, compare the Womb to a fruitful Field; for as the Seed of Plants produce no Fruit, nor cannot ſpring, unleſs ſown in a Field fit to excite and awaken their vegetative Virtue aſleep, and, as it were, bury'd in the Subſtance; even ſo the *(b)* Seed of Men and Women (tho' potentially containing in them the Form and *Idea* of all the Parts of a Child to be engendred out of it)

it) would never produce so admirable an effect, if they were not poured forth into the fruitful Field of Nature, to wit, the Womb, which having received both, embraceth them closely, and by its Heat and particular Properties, making use of the Spirits, with which the Seed abounds, immediately separates the *Chaos*, and afterwards delineates and traceth forth all the Parts of the Body of an Infant, which it perfects, nourisheth, and preserves to the full time of Labour.

It is for this purpose, that the Author of Nature hath placed the Womb in the Woman's Belly, that the Heat might always be maintained by the Warmth of the Parts surrounding it. It is seated in the middle of the * *Hypogastrium*, between the Bladder, and the † *Rectum*, which serves as Cushions to support it, lest it receive hurt by the hardness of the Bones, which form the Hollowness of the *Hypogastrium*, and also defends the Womb, as a steady Rampart, against outward Injuries. It is placed in the lower part of the Belly, for the convenience of Copulation, and that the *Fœtus* may the easier be extruded at the full time. In this Position it hath room to be extended when the Woman's with Child; neither is there any manner of Hinderance by the Belly, which being of a fleshy Substance, affords as much as necessary for the Distention of the Womb.

* *From the Belly downwards.*
† *The Great Gut.*

It is of a Figure round, oblong, something resembling a great Pear; for from a broad Foundation, which is its Bottom, it terminates by degrees in the point of its inward Orifice, which is narrow. The Roundness is notwithstanding a little flat before and behind, so shaped, that it should not easily waver from side to side, but be more steady in its place. When we represent the Womb of this Shape, 'tis to be understood of the principal part, being the proper Body singly, without comprehending the Neck, otherwise

called

called the *Vagina.* There may be likewiſe obſerved, on the ſides of this Bottom, two little Eminences, called, (*c*) *the Horns of the Womb*; becauſe they do in ſome manner reſemble the little Horns which begin to ſhoot forth in Calves.

The Length, Breadth, and Thickneſs of the Womb, differs according to the Age and Diſpoſition of the Body; for in Maids not yet ripe, 'tis very ſmall in all the Dimenſions, and in Women (who have their Terms in great Quantity, and ordinarily uſe Copulation) 'tis much larger than either in thoſe who have them in ſmall Quantities, copulate ſeldom, or in Virgins. Such who have had Children, have them yet larger than ſuch as have had none, and chiefly when but lately lain in; for at that time the Womb is filled with abundance of Humours: But, in Women of a good Height, and well ſhaped, the Length is, from the Entry of the privy Part to the Bottom of the Womb, uſually (*d*) eight Inches, or thereabouts (and not eleven, as moſt Anatomiſts have written) and the Length of the Body alone, is three Inches, and the Breadth, towards the Bottom, is near the ſame, and of the Thickneſs of a ſmall Finger, the Woman not being with Child. This Bottom then mounts not higher than the *Os ſacrum*; but when with Child, the Womb extends and becomes of a prodigious Greatneſs, ſo that in the laſt Months it fills the greateſt part of the lower Belly.

Almoſt all the famous Anatomiſts, as well ancient as modern, aſſure us, that the Womb (by a Miracle of Nature more wonderful than any) becomes ſo much the thicker, by how much it is extended and dilated, from the time of Conception to the End of Reckoning: But I am aſtoniſhed, that *Laurentius Riolanus*, and *Bartholinus*, thoſe precious Lamps of Anatomy, ſhould be ſo little enlightned in this point, as not to diſcover ſo great a Falſhood, but deliver it on Credit, by example of their Predeceſſors. All thoſe

that

that will take the Pains to examine the thing, when Occasion offers, (as I have done) may easily find the (*e*) contrary: For 'tis most certain, that the more the Womb is dilated, when impregnated, the more it becomes thin and fine, for (as *Galen* very well saith, in express Terms, in the 14*th* Chapter of the 14*th* Book of the *Use of Parts*) its Thickness at that time is consumed by its great Extension, for which reason it becomes then very weak: It is that which *Carolus Stephanus* hath also very well noted, being an expert Anatomist, whose words upon the Point very well agree with *Galen*'s, and are; *Uteri substantia in principio conceptus crassa, cum autem prope tempus pariendi accedit, major quidem sed tenuis evadit, crassitudo enim in longitudinem extensa absumitur, tempore autem intercedente pro ratione magnitudinis crassitudinem habet.* 'The 'Womb, saith he, is thick at the Beginning of the 'Conception; but when the time of Labour approach-'eth, it becomes truly larger, though thinner, because 'the Thickness is wasted by the Extension; and be-'tween both those times, this Thickness lessens propor-'tionably, as it extends and grows greater. I find *Vesalius* was also of the same Opinion, with much Reason, because true. And as we see the Bladder (which when wholly empty, appears to have the Thickness of half a Fingers Breadth) becomes less thick still, according to the Quantity of Urine flowing to it, and (being totally repleniished and extended) it is so thin, as it is almost transparent; and afterwards being empty'd again, returns, by degrees, to be thicker in Proportion, as it contracts and collects it self: (*f*) Even so the Womb, which is very thick, being empty, loseth by degrees, this Thickness, in proportion as it is filled and extended when pregnant, and becomes so thin in all its Circumference, that towards the last Months 'tis almost as much extended as the Bladder, except only the Place where the Burden cleaves, and is fastened to it: For there indeed it is a little thicker

and

and more ſpongious; but (*g*) immediately after Labour it reaſſumes its firſt Thickneſs, by contracting and collecting its Membranes (which were, during the Pregnancy, extreamly extended) and appears at that time ſomething thicker than at another, becauſe it then contains abundance of Humours, which gradually iſſue forth with the Cleanſings, and then it returns to its ordinary Thickneſs. Let the World therefore be no longer deceived with this old Error, which hath almoſt infatuated all Men: nor believe, that the Womb is towards the laſt Months of Reckoning, of the Thickneſs of two Fingers Breadths, as Authors have imagined, being it is very true, that it is never ſo thin as at that time, in which it is extream thin, even as I have explicated, to confirm the Opinion of *Galen*, and *Carolus Stephanus*, who very well knew the Truth of it.

Now the Womb is made of a membranous Subſtance, that it might the eaſier open to conceive; be extended and dilated for the Growth of the *Fœtus*; be contracted and cloſed again to extrude it and the After-burden, in due time; and afterwards to retire and place it ſelf in its firſt Eſtate; as alſo to expel any ſtrange Humours which ſometimes may be contained within it.

It is compoſed of many ſimilary Parts, as Membranes, Veins, Arteries, and Nerves. It hath two Membranes, which compoſe the principal Part of its Body, of which the outmoſt is the common, and ariſeth from the *Peritonæum*; it is very thin, ſmooth without, and unequal within, the better to cleave to the (*h*) other, which is called the proper Membrane to the Womb, and is as it were fleſhy, and thickeſt of all thoſe we meet in the reſt of the Body, when a Woman is not with Child, as we have ſaid already: It is interwoven with all ſorts of *Fibres*, that it might be the more capable (without Danger of burſting) to ſuffer the Extenſion the Child and the Waters cauſe

du-

during Pregnancy, and that it might the easier close on all sides after Travail.

The Veins and Arteries proceed partly from the Spermatick Vessels, and partly from the *Hypogastricks*: All these Vessels are inserted and terminated in the proper Membrane of the Womb; the Arteries convey to it Blood for its Nourishment; which being brought thither in too great abundance, sweats through the Substance of it, and distils in manner of a Dew into the Vacuity of its Bottom, whence proceeds the Terms in a Woman not with Child, and the Blood which nourisheth the *Fœtus* when big-belly'd. I say, the Arteries convey the Blood, for as much as the circular Motion, which is made continually in all living Animals, shows us, that they alone are capable of doing it, and not the Veins, which serve only to reconduct to the Heart the Blood which is not evacuated, after the manner aforesaid, by the Womb, nor consumed either in its Nourishment, or the nourishing the *Fœtus*, when the Woman is big. The Branches which issue forth of the Spermaticks, are inserted on each side of the Bottom of the Womb, and are much less than those which come from the *Hypogastricks*, which are greater, and bedew the whole Substance of it. There are yet some small Vessels, which arising the one from the other, are conducted to the inward Orifice, by which sometimes Women with Child purge away the Superfluity of their Terms, when it happens, that they have more Blood than their Infant can consume for Nourishment; which wise and prudent Nature hath so ordered, that the Womb, during its Pregnancy, be not obliged to open it self to pass away those excrementitious Humours, which otherwise might very often cause Abortion.

As to the Nerves, they proceed from the (*i*) sixth Pair of the Brain, which furnisheth all the inner Parts of the lower Belly with them, and is the reason it

hath

hath ſo great a Sympathy with the Stomach, which likewiſe is very conſiderably furniſhed from the ſame ſixth Pair, ſo that the Womb cannot be afflicted with any Pain, but it is immediately ſenſible, as appears by the Loathings and frequent Vomitings happening to it.

There are likewiſe ſome others which ariſe from the Marrow of the Back, or *Spinalis medulla*, towards the Loins and *Os ſacrum*, which endueth the Womb with an exquiſite Senſe, and inciting the Woman to a Deſire of Copulation, cauſeth to her, in the Action, a moſt grateful Alteration throughout her whole Body.

Over and above all theſe Parts, which compoſe it, the Womb hath yet four Ligaments, which ſerve to keep it firm in the place, and to prevent the conſtant Agitation, by the continual Motion of the Inteſtines which ſurround it; two of which are above, and the other two below. The Superiors are called the *Broad Ligaments*, becauſe of their broad and membranous Structure; they are nothing elſe but Productions of the *Peritonæum*, which growing forth of the ſides of the Loins, towards the Reins, paſs forwards to be inſerted in the ſides of the bottom of the Womb, to hinder the Body from bearing too much on the Neck, and from ſuffering a Precipitation, or bearing down, as happens when the Ligaments are too much relaxed; and likewiſe contain the Teſticles, and conduct ſafely as well the ſpermatick deferent Veſſels, as the Ejaculatories, to the Womb. The two Inferiors, called *Round Ligaments*, take their Originals from the ſides of the Womb near the Horns, whence they paſs to the Groins, together with the Production of the *Peritonæum*, which accompanies them through the Rings, or Holes of the oblique and tranſverſe Muſcles of the Belly, where they divide themſelves into many little Branches, in Form of a Gooſe Foot, of which ſome are inſerted into the *Os Pubis*, and the reſt are loſt and

confounded with the Membranes that cover the upper and interior part of the Thigh: And 'tis from thence that those Pains and Numbness which Women with Child feel in their Thighs, proceed.

Those two Ligaments are long, round, nervous, and big enough in their Beginning, near the Matrix: *Riolanus* saith, that he hath observed them hollow at their Rise, and all along to the *Os Pubis*, where they are a little smaller, and become flat, the better to be inserted in the manner aforesaid: It is by their Means the Womb is hindred from rising too high. Now although the Womb is held in its natural Situation, by means of these four Ligaments, yet notwithstanding it hath Liberty to extend it self sufficiently, when pregnant, forasmuch as they are very loose, and therefore easily yield and obey to its Distension.

Besides these Ligaments which so hold the Womb bridled above and below, it is yet fastned, for greater Surety, by its Neck, both to the Bladder and *Rectum*, between which it is situated; whence it happens, that if at any time it be inflamed, it communicates it likewise to the neighbouring Parts.

Its proper Action or Use, consists in the receiving and retaining the (*k*) Seed both of Men and Women, and to reduce them from Power into Action, by its Heat, for the Generation of the Infant; it is therefore absolutely necessary for the Conservation of the Species. It seems likewise by Accident to receive and expel afterwards the Impurities of the whole Body, as when Women have abundance of Whites; and to purge away, from time to time, the Superfluity of the Blood, as it doth usually every Month, by the Evacuation of the Terms, when a Woman is not with Child. Now since that by the Name of the Womb in general, we understand all that is comprised from the Privities to the Bottom of it, which is the Place of Conception, it is not enough that we have described all the similary Parts of it, and examined

mined it outwardly; but it is requisite, for a more perfect Discovery, to make a Description of its dissimilar Parts, which are four, *viz.* the Bottom, the inward Orifice, the Neck, and the outward Orifice, commonly called the *Privities.* This is that we must at present examine, beginning at the Privities, because it is the Entry that must lead us into the other Parts, that so we may the better consider the admirable Structure of it.

For our better understanding of which, we must consider divers others thereabouts, some whereof appear outwardly of their own accord, and the rest are concealed within these, and cannot be seen, unless the two great Lips are stretched asunder, and the Entry of the Privities a little opened. The Parts appearing need no Description. The Parts hidden behind, or between these, are the *Clitoris*, the Urinary Passage, the two *Nymphes*, and the four Caruncles.

The *Clitoris* may be observed in the uppermost part, just above the Urinary Passage, being a small Parcel of little round Substances, and called by *Fallopius*, the *Clitoris*.

This *Clitoris* hardly appears in dead Corps, being very small; but it is much greater in the living, and swells and grows hard in Proportion to their desire of Copulation, caused by the Access of Blood and Spirits, in this Action, much in the same manner as a Man's Yard becomes erected; wherefore some have called it the *Woman's Yard*, judging it to resemble the Man's in some fashion, as well in Figure as Composition: Some Women have this *Clitoris* very long, so, that 'tis said, some abuse it with other Women.

Under the *Clitoris* appears the Orifice, or Urinary Passage, which is much larger in Women than in Men, and makes them pis with a greater Stream: There may be seen at the same time, on the Sides of the Urinary Passage, two small membranous Appendices, a little broader above than below, issuing forth of

the inward Parts of the great Lips, immediately under the *Clitoris*. The uſe whereof is to cover the Orifice of the Urine, and defend the Bladder from cold Air; and when a Woman piſſeth, they contract themſelves ſo, by approaching to each other, that they conduct (by being joined in the Bottom) the Urine, without ſuffering it to ſpread along the Privities, and often without ſo much as wetting the Lips; wherefore theſe ſmall membranous Wings are called the *Nymphes*, becauſe they govern the Woman's Water, the Urine. Some Women have them ſo great and long, that they are neceſſitated to have them cut off, ſo much as exceeds and grows without the Lips. They are very red in Virgins, and eaſily ſupported; but they are livid and more ſoft, and pendant in thoſe who often copulate, or have had Children.

Theſe Parts being conſidered, we are to take notice of the inferior part of the great Notch, where (widening theſe Lips) appears the Navicular Ditch, formed by the Conjunction of theſe Lips, which makes alſo a kind of a Fork, upon which reſts the Man's Yard, when introduced into the Neck of the Womb, beginning in this place.

Afterwards in the Entry of the Neck are diſcovered four ſmall fleſhy Eminences, ordinarily called the *Caruncles Myrtiformes*, on each ſide two, and another ſmall one above, juſt under the Urinary Paſſage. They are reddiſh and puſt in Virgins, and joined almoſt one to the other on their Sides, by the help of ſmall tender Membranes, which keep them in Subjection, and make them in ſome ſort reſemble a Roſe-bud half blown. This Diſpoſition of the *Caruncles*, is the very certain Mark of Virginity; it being vain to ſearch it elſe-where, or hope to be informed of it any other way; and 'tis from the preſſing and bruiſing theſe *Caruncles*, and forcing and breaking the little Membranes (joining them together) in the firſt Copulation, that ſometimes (though not always) there happens

pens an Effuſion of Blood; afterwards they remain ſeparated, and never recover their firſt Figure, but loſe it conſtantly more and more, according as they often uſe Copulation, waxing flat, and almoſt totally defaced in thoſe who have had Children, by reaſon of the great Diſtenſion theſe Parts ſuffer in Labour. Their uſe is, to ſtraiten the Neck of the Womb to hinder the cold Air from incommoding it, as alſo to augment the mutual Pleaſure in the Act of Generation; for theſe *Caruncles* being at ſuch time extreamly ſwell'd, and filled with Blood and Spirits, they cloſe more pleaſantly upon the Man's Yard, whereby the Woman is alſo more delighted. This almoſt is all can be ſaid touching the privy Parts, and theſe others appertaining to them.

(a) *Of this ſee Chap. the ſecond's Obſervations.*

(b) *The fore-mentioned Obſervations tend to the correcting of the Author's Error here.*

(c) *Of which we have ſpoken formerly.*

(d) *The Dimenſions ſeldom or never are the ſame in one as in another.*

(e) *Our Charity for the Author, makes us believe, the* French *Women differ in this reſpect from ours, with whom it is apparently otherwiſe.*

(f) *Experience will convince any inquiſitive Perſon of the contrary.*

(g) *In ſixteen or eighteen Days it reaſſumes its priſtine Thinneſs.*

(h) *Which is fleſhy and more porous.*

(i) *Mediately, but immediately from the* Plexus Meſentorii Maximus.

(k) *Of this I have ſaid enough before.*

The four following Figures repreſent different Matrixes of ſeveral Animals, that you may learn wherein their Structures differ from a Woman's.

The

The first is of a Bitch.

A. A. *Shows the two sides of the Womb, resembling almost a Gut. These two Parts are fastned by their Ends under their Reins.*

B. *Part of the* Vagina *slit towards the Bottom.*

The second is of a Rabit.

C. C. *Shows the two sides of the Womb, which likewise are fastned at their Extremities towards the Reins. You may observe in each of these sides some Traces of small Cells where the Young lodge.*

D. *Part of the* Vagina *open towards the Bottom.*

The third Figure is of an Ewe.

E. E. *The two sides which do very well resemble the Horns of a Ram.*

F. *The Body of the Womb.*

G. *A small Portion of the* Vagina *opened, where terminates the inward Orifice, which appears.*

The fourth Figure represents the Womb of a Rabit full with eight young Ones, each of which hath its particular Cell to lodge in. I have observed one thing particular in the Womb of a Rabit; which is, two inward Orifices both terminating near together in the *Vagina.*

CHAP. V.

Of the Vagina, *or Neck of the Womb.*

UNder the Neck of the Womb, we comprehend all that long and broad membranous Space couched before it, from the four Caruncles, lately de-

Fig. I.

Fig. II.

Fig. III.

Fig. IIII.

deſcribed, to the inward Orifice, and which in the Act of Generation ſerves for an Anti-Chamber to lodge the Man's Yard, as in a Sheath, which conducts it even to the inward Orifice, that it may there caſt forth its Seed; wherefore it is commonly called the *Vagina*, or *Sheath*.

This Neck is of a membranous Subſtance, the better to extend it ſelf, for to give ſufficient Paſſage to the Infant at its Birth. It is compoſed of two Membranes, the innermoſt of which is white, nervous, and circulary, wrinkled like the Pallat of an Ox, that it might dilate, contract, extend, or abbreviate it ſelf, according as it is neceſſary, to bear exact Proportion with the Bigneſs and Length of a Man's Yard; and to the end that (by the Colliſion made in Copulation) the Pleaſure may mutually be augmented: But the external Membrane is red and fleſhy like a *Sphincter*, ſurrounding the firſt, to the end the Yard may be the better cloſed within it: 'Tis by means of this Membrane, that the Neck adheres the ſtronger to the Bladder and *Rectum*. The internal Membrane is very ſoft and delicate in young Girls, but grows firmer in Women much addicted to Copulation, and at length becomes ſo hard, (by often uſing this Trade) that old Women have them almoſt **Cartilaginous*.

* *Griſly.*

In Women, who have not yet had Children, this Neck is for the moſt part but four good Inches in length, (it being almoſt always poſſible with a Finger to reach the inward Orifice of the Womb, where it ends) and an Inch and half broad, or thereabouts; but in ſuch who have once been in Child-bed, it is much broader and ſhorter, by which 'tis eaſier to touch the inward Orifice with a Finger. Its Breadth is almoſt all along equal, from one end to the other, without having any *Hymen* in the Middle, as divers Authors would have it, who ſay, That you may find there a Membrane ſituated a-croſs, pierced only with

a little Hole, through which the Terms and other Superfluities ſhould paſs; which remains ſo ſpread, that either by Copulation, or otherwiſe, 'tis forced and rent, by which one may know whether the Woman were a Virgin or not: But this is a pure Abuſe, and if (as *Laurentius* ſaith very well) ſuch a Membrane be found in ſome Women, it is moſt certainly contrary to the Deſign of Nature, ſince they are not found in a Female *Fœtus*, (which I can very well aſſure you, having diſſected a great Number of them) no nor in any Maid or Wife, of what Age ſoever, who have no other Mark to conjecture their *Virginity* by, but the Diſpoſition of thoſe *Caruncles Myrtiformes*, deſcribed above, and being placed at the Entry of the Neck of the Womb, render the Paſſage thereof more ſtrait. Let us now ſee what the Structure of the inward Orifice is.

CHAP. VI.

Of the inward Orifice of the Womb.

THe inward Orifice is nothing but the abutting of the Body of the Womb on the Bottom of the *Vagina*, reſembling the Muzzle of a Puppy newly pupp'd; in the midſt of which may be ſeen a very narrow Paſſage, which being opened, gives way to what is fit to be received in the Womb, or to let out what is fit to be expelled. It is called the *Inward Orifice*, to diſtinguiſh it from the outward Entry of the Neck of the Womb, which is called the *Outward Orifice*. The Midwives call it the *Crowning* or *Garland*; becauſe it girds the Infant's Head, ſurrounding it like a Crown, when a Child preſents to a natural Birth.

This

This Orifice, which is almoſt always ſhut, opens it ſelf at the time of Coition, to give way for the Man's Seed to enter, which by this means is darted to the very Fund of the Womb; and likewiſe to let the Terms iſſue forth, of which it is purged every Month, as alſo for the Expulſion of falſe Conceptions, or any other ſtrange Body there engendred; and altho' it be ſo exactly cloſe after Conception, and during Pregnancy; yet at the time of Labour it is opened ſo extraordinarily, that the Infant paſſeth through it into the World; then this Orifice wholly diſappears, and the Womb ſeems to have but one great Cavity (equally large like that of a Bag) from its Bottom to the very Entry of the Neck. When a Woman is not with Child, 'tis a little oblong, and of Subſtance very thick and cloſe; but when with Child, it is ſhortned, and diminiſheth in Thickneſs proportionably to the Diſtention of the Womb: Therefore you muſt not believe *Laurentius*, when he affirms, That its Subſtance waxeth thicker a little before Labour; for it is moſt certain, that it is then thinner than ever, and that this Orifice appears then very flat, and not oblong, as it is when a Woman is not with Child.

Towards the laſt Months of * Pregnancy, 'tis indued with a ſlippery and viſcous Humour, not unlike Snot, proceeding from the Waters and Moiſtures ſweating through the Infant's Membranes, and acquiring this viſcous Conſiſtence by the Heat of the place, and the ſtay they make there, and which afterwards moiſtneth and floweth down from this Orifice, then beginning, by little and little, to be opened and ſoftned by this ſlippery Matter; which is an aſſured Sign that Labour will ſoon follow.

* *Or being with Child.*

As to the Action, by which the inward Orifice is opened and ſhut, according to ſeveral Occaſions, 'tis purely natural, and not voluntary; which is not a-

miſs: For if the Motion of this Orifice depend on the Will of the Woman, there would be many who would thereby hinder Conception in the Uſe of Copulation; and there would be many wicked enough to expel and reject, at pleaſure, the Seed which they have conceived.

CHAP. VII.

Of the proper Body and Fund of the Womb.

AFter an Account of the Womb in general, in the preceding Lines, there remains no more to conſider particularly, but that which we call the proper Body, which is the largeſt and moſt elevated principal Part, in which the Conception is made. The Body extends it ſelf by always enlarging, from the inward Orifice, to the Fund of the Womb; it is lodged under the Bottom of the Bladder, and ſuſtained upon the *Rectum*, without being faſtned to the one or the other; but it is free both before and behind, to the end it might be extended and cloſed, when neceſſary; nevertheleſs it is in ſome ſort held in Subjection, by the Help of the Ligaments of the Womb, which faſten it on each ſide.

The Body of the Womb reſembles (as already ſaid) a great Pear. It is round, but a little flat before and behind, that it might be the firmer in its Situation. All the exterior part of its Fund is very cloſe and ſmooth, except the two ſides, where may be marked little Eminencies, called the *Horns of the Womb*; in which place are terminated, on each ſide, the Ejaculatory Veſſels, and the round Ligaments are faſtned. It is of a membranous Subſtance, of the Thickneſs of the Breadth of a good Finger, which makes the inward Cavity ſmall enough, to the end it may on all ſides

ſides ſtraitly embrace and touch the Seed after Conception.

Moſt part of other Animals (as may be ſeen in the ſeveral Figures repreſented in *p.* 24, 25.) have their Womb divided into two parts, a right and a left, in each of which they have as many Cells as they can bear little Ones at one Birth (having likewiſe their Waters and Veſſels diſtinct) and is there involved with its particular Membranes; but that of a Woman, notwithſtanding they have ſometimes ſeveral Children together, is not ſo diſpoſed; for you never find there but one and the ſame ſingle Cavity, in the midſt of which appears a ſmall Line, very ſlight, not unlike that which is ſeen under the *Scrotum*; which made *Hippocrates* ordinarily divide this Cavity into the right and left part, believing beſides, that the Males are rather engendred on the right, and Females contrarily on the left-ſide; as in his 48*th Aphoriſm* of his 5*th* Book, where he ſaith preciſely, *Fœtus mares dextrâ parte uteri, fœminæ ſiniſtrâ magis geſtantur.* But to ſpeak the Truth, the Cavity is but one, in the midſt of which are always naturally ſituated as well Males as Females. We cannot find here thoſe ſmall Eminences which he calls *Cotyledons*, not uſually found but in horned Beaſts; for a Woman's is inwardly very ſmooth, or at leaſt very little unequal; in the Cavity of which is nothing elſe to be obſerved but this ſmall Line, even now deſcribed, and ſome few ſmall Pores, which ſeem to be the Extremities of the Orifices of the Veſſels, which end there, and to which the Afterburthen in a Woman with Child is faſtned, that it might receive thence the Mother's Blood, which (by an admirable Providence of Nature) flows thither continually, to ſerve afterwards for Nouriſhment, and Growth of the Infant, whilſt it ſojourns in the Womb.

Now having hitherto fully diſcovered whatever may be conſidered about the Parts of a Woman deſtin'd

to

to Generation, that they may be the better underſtood, and may ſerve as a Guide and Lamp to conduct and enlighten us in the Difficulties met with in the Knowledge and Cure of Diſeaſes of Women with Child, and in Child-bed: 'tis time to enter upon the Matter, and examine what theſe Maladies are, and ſhew the means how to manage their Cure.

End of the Treatiſe of the Parts of a Woman appointed for Generation.

The

The First BOOK.

Of Diseases, and different Dispositions of Women with Child, from the time of Conception to the full Time of Reckoning.

MANY Indispositions happen to Women from the time of Conception to the full Term of Labour, being then not only subject to those caused by Pregnancy, but to those also which happen at other times. It is not my Design so to enlarge, as to examine all, but only to enquire into the principal and most usual Maladies accompanying Great Bellies, and having, during their Course, particular Indications for their Cure; for as for such which have only general Indications, and happen indifferently to a Woman at any time, they may easily be known and redressed by ordinary means, provided you have all the while regard to the Great Belly.

It would be sufficient to my purpose of a strict Examining every Circumstance of a Great Belly, in pursuance of my Design, to begin with the Explication of a Conception, which must precede it: But, since that cannot happen but to a fruitful Woman, I will, before I discourse of it, that you may the better understand its Original, give you some considerable Observations concerning the Fruitfulness and Barrenness of Women. For Barrenness proceeds oftner from Women than Men: There being many Conditions required in a Woman, of which Men have no Occasion, who only need to provide a small Quantity of Seed, and that

at once to generate; but Women, beſides their Seed, muſt have a fit place to receive both, as the Womb is when well diſpoſed; and Matter appointed for the Child's Nouriſhment, during its whole ſtay there, as the menſtruous Blood: This is the Cauſe, that for one impotent Man, there may be above thirty barren Women found. Let us therefore firſt ſee what are the Signs of Fruitfulneſs and Barrenneſs in Women.

CHAP. I.

Of the Signs of Fertility and Sterility in Women.

BY the *Fertility* of a Woman, I underſtand ſuch a natural Diſpoſition of her Body, as by which (with the Aſſiſtance of a Man) ſhe may engender her like: And by *Sterility*, which is directly contrary, I intend an Impotency, proceeding from ſome Vice or Fault, either of her whole Body, or ſome particular Part. Let therefore ſome Enquiries after the moſt noted Signs of the one and the other be made, and chiefly of thoſe perceived by our Sight or Touch, by which it's better judging than by many others, for the moſt part uncertain: For thoſe taken from different Temperaments, may eaſily deceive us, foraſmuch as we often find Women of a very ill Habit, and full of ill Humours, notwithſtanding fruitful.

Firſt, therefore, We affirm the Womb to be a Part abſolutely neceſſary to Fertility, and the principal Object to be repreſented and examined: For as every Ground is not proper to yield Fruit, and ſome ſo ungrateful as to produce nothing; ſo likewiſe it is not enough for a Woman to have a Womb to be capable of Conception, ſince divers that have them, are barren.

We have already ſhewed you exactly what the Compoſition and natural Structure of it ought to be, to ſerve

ſerve to ſo admirable an End as Generation: Wherefore we will now ſpeak no further, but refer you to that place to be informed of that.

Know then in general, that the Signs of Fecundity in Women are, that the Womb be well diſpoſed, that ſhe be at leaſt thirteen or fourteen Years of Age, and at moſt but 45 or 50 generally, and for the moſt part (though ſome, yet very rarely, conceive ſooner or later, according to their different Natures and Diſpoſitions) that they be of a good Temperament and indifferent Sanguine, have their Courſes in due time, of good Blood, and laudable in Colour, Quantity, Quality, and Conſiſtence, and regularly every Month, at once, without Interruption, from the time they begin to flow, till the time the Evacuation is compleated.

We ſay the Blood ought to be good and laudable, becauſe it is a Regurgitation and natural Evacuation only of what is ſuperfluous in Women not with Child, and yet of Age capable of Conception; which hath no Malignity in it ſelf, as many falſly imagine: for in healthful Women it hardly differs either in Colour, Conſiſtence, or Quality, from that which remains in the Veſſels, except the ſmall Alteration, cauſed by the Heat of the Place whence it proceeds, and by the Mixture of ſome Humours with which the Womb is always plentifully furniſh'd.

The Evacuation (if in order) ſhould be but once every Month, though ſome have them every Fortnight, or at the end of three Weeks, according as they are more or leſs ſanguine, cholerick, or have their Blood heated: and to continue two or three Days together, or ſix at moſt, and that by little and little, conſtant without Interruption, and alſo more or leſs, according to the Difference of their particular Temperaments. If a Woman have few of them, as when grown in Years, ſhe becomes barren, foraſmuch as this Blood ſeems to nouriſh the Child in the Womb: And likewiſe if ſhe have too many, ſhe thereby grows too weak, and the

Womb too cold. There are notwithſtanding ſome Women who void more of them in two days, than others in eight. They muſt flow by Degrees, and without Interruption, and not all at once; for great and ſudden Evacuations cauſe great Diſſipations of Spirits, of which abundance are neceſſary for Generation; and the Interruption of theſe Evacuations ſhews ſome Impediment in Nature, or ſome Vice or evil Diſpoſition of the Womb.

If all theſe Signs concur, we may very probably judge the Woman fruitful; I ſay probably, becauſe many have them all, and yet cannot conceive, though they do their Endeavours, and obſerve thereto all the requiſite and neceſſary Circumſtances hereafter mentioned. There are likewiſe others, who, notwithſtanding they have not all theſe Conditions, are fruitful. Now if all the above-named Particulars are found in a Woman barren, and you deſire to inquire more narrowly, and to be informed more certainly, whether ſhe be capable of Conception, *Hippocrates* teacheth a Way to know it, to which I give little Credit, becauſe the Reaſons of it are obſcure. It is in the 59th *Aphoriſm* of his 5th Book, where he ſaith, *Si Mulier non concipiat, & ſcire placet an ſit conceptura, veſtibus undique obvolutam ſubter ſuffito: ac ſi odor Corpus pervadere videatur, ad nares & os uſque, non ſua culpa ſterilem eſſe ſcito.* If a Woman doth not conceive, and you are deſirous to know whether ſhe is capable, or no, wrap her cloſe round with Clothes, and put a Perfume under her: and if ſhe perceive the Scent to paſs through her Body to her Noſe and Mouth, be aſſured (ſaith he) it is not her Fault ſhe is barren.

Fertility was anciently ſo eſteemed by our Forefathers, that they believed Barrenneſs to be a Mark of Reprobation; by reaſon of which the fruitful Servant depiſed her barren Miſtreſs; as we read in the 16th Chapter of *Geneſis*, where mention is made of *Sarai*, *Abraham*'s Wife, who, ſeeing ſhe could have no Chil-

Children, and being past the Age of hoping for any, and that her Husband was displeased at it, bid him take her *Ægyptian* Chamber-maid, named *Agar*, to lie with him, that by her means she might give him Lineage; which good Father *Abraham* quickly did, and had by her afterwards a Son, called *Ishmael*: But from the time this Maid conceived, she began to despise her Mistress *Sarai*, as yet barren. The Women of our times are not so earnest to have Lineage after this Fashion, there being but few that will suffer their Husbands to caress their Chamber-maids, much less charitably excite them to follow this Example, which Custom is abolished amongst us.

I also admire the great Passion many have, who complain of nothing with greater Regret than dying without Children, especially without Sons. For my part, I believe they that descend from *Cæsar*, or the Family of *Bourbons*, may with some Reason be led away with this superstitious and common Inclination of preserving their Kind, and be vexed with these sorts of Inquietudes, no ways becoming ordinary People; tho' excusable, and permitted to great Monarchs and Illustrious Men.

When we perfectly understand the natural Dispositions, we may the easier discern those contrary to Nature; wherefore the Signs of Fruitfulness easily teach us those of Barrenness. The Signs and Causes of Barrenness proceed either from Age, or evil Temperature, and vicious Conformation of the Womb, and Parts depending on it, or the Indisposition and Intemperature of the whole Habit. The evil Conformation of the Womb renders Women barren, when the Neck (called the *Vagina*) is so narrow, that it cannot give way to Penetration; and when it is wholly, or in part, closed by some external or internal Membrane, (which is very rare, if at all) or by any Tumour, Callosity, or Cicatrice, hindering the Woman from free Use of Copulation.

But it is not sufficient the Man's Yard enter the *Vagina*, the Antichamber to the Womb: For if, in the Act of Copulation, he knocks at the Door, which is the internal Orifice, and it be not opened, all is to no purpose. This Orifice is likewise hindred from opening by some Callosity, proceeding from abundance of ill Humours, which usually flow down from the Matrix, or by some Tumour happening to it; or also, by some Part which may so compress it, that it cannot dilate to receive the Seed, as doth the *Epiploon* (or Cawl) in fat Women, according to the Opinion of *Hippocrates*, in the 46th Aphorism of his 5th Book, where he saith, *Quæ pretor naturam crassa, non concipiunt, iis os uteri ab omento comprimitur, & priusquam extenuentur, non concipiunt.* Women exceeding fat do not conceive, because the Cawl compresseth the Orifice of their Womb, neither can they till they grow lean. I do not willingly admit, amongst the Causes of Barrenness, this Compression of the inward Orifice by the *Epiploon*, forasmuch as *Aritin* hath very well remedy'd it, by some of the Postures invented by him, by which this Orifice needs not be so compressed in the Action.

The most frequent Reason why this Orifice opens not in this Act to receive the Man's Seed, is the Insensibility of some Women, who take no Pleasure in the venereal Act; but when they have an Appetite, the Womb desirous and covetous of the Seed, at that Instant opens to receive, and be delighted with it. But though the *Vagina*, or Neck of the Womb, and the inward Orifice opens to give Passage to the Seed, yet may they very often continue barren, if the Situation of this Orifice be not rightly placed, but either forwards above the Share-bone, or backwards towards the * *Intestinum rectum*, or towards either side; all which hinders the Man from darting his Seed directly into it, and consequently the Woman from conceiving.

* *Great or right Gut.*

Hippocrates seems to have noted all the Signs and Causes

ſes of Barrenneſs, which uſually proceed from the evil Temper of the Womb, in his 62d Aphoriſm of the 5th Book, where he ſaith, *Quæ frigidos & denſos habent uteros, non concipiunt, & quæ præhumidos habent uteros, non concipiunt: extinguitur enim in ipſis genitura. Et quæ plus æquo ſiccos & adurentes: Nam alimenti defectu ſemen corrumpitur. Quæ vero ex utriſque nactæ ſunt moderatam temperiem, eæ fæcundæ evadunt.* All ſuch Women whoſe Womb is cold and thick, cannot conceive; nor they who have it too moiſt, becauſe the Seed is extinguiſh'd in it. And likewiſe ſuch who have it too dry and hot; becauſe for want of Aliment the Seed corrupts; but ſuch as are of a moderate Temperament are fruitful. Of all theſe which *Hippocrates* recites in this Aphoriſm, the moſt common, according to my Opinion, is the continual Humidity of the Womb, fed by an Abundance of the Whites, with which many are very much inconvenienced, the Humours of the whole Body being accuſtomed to ſtir their Courſe this way, which can very hardly be turned away when inveterate; and the Womb being imbued with theſe vicious Moiſtures, becomes inwardly ſo unctuous and ſlippery, that the Seed (tho' viſcous and glutinous) cannot cleave to it, nor be retained within it, which is the cauſe it ſlips immediately away, or in ſome ſhort time after it is received.

Barrenneſs alſo proceeds from the whole Habit of the Body, as when a Woman is too old, or too young; for the Seed of the Young is not yet prolifick, neither have they the menſtruous Blood; two things requiſite to Fruitfulneſs: And that of the Aged is too ſmall in Quantity, and too cold; they likewiſe want the menſtruous Blood. An univerſal Intemperature (tho' the Woman be of convenient Years) renders them however barren, as when they are hectick, hydropick, feveriſh, and ſickly, and eſpecially ſo much the more, as the noble Parts are fallen from their Temperament and natural Conſtitution. There are however

many ſeem Barren for a long time, becauſe of ſome of the fore-mention'd Reaſons, yea, till they are thirty five or forty Years Old, and ſometimes longer, who yet at laſt conceive, being cured of the Indiſpoſitions which hindred them, and having changed their Temperament by Age, of which we have had a remarkable Example in the Perſon of Queen-Mother, lately deceaſed, who was above twenty two Years married, and without Children, and yet afterwards, to the great Joy and Content of all *France*, ſhe had our invincible Monarch, *Lewis* the 14th, now reigning.

Some of theſe Barrenneſſes may ſometimes be cured, by removing the Cauſes, and procuring the Diſpoſitions we have ſaid are neceſſary to Fruitfulneſs; yea, of thoſe that proceed from an univerſal Intemperament, by reducing the Body with a good and convenient Regimen to a good Order, and this according to their reſpective Indiſpoſitions. Wherefore if a Woman have naturally the *Vagina* too narrow, and not from ſome of the Cauſes above-mentioned, ſhe ought to be joined to a Man whoſe Member is proportionable, if poſſible: and if that will not do, (which happens very ſeldom) ſhe muſt endeavour to relax and dilate it with emolient Oils and Ointments; if the Neck of the Womb be compreſſed by any Humour, it muſt be reſolved and ſuppurated according to its Nature and Situation, having always Care to prevent the Corruption of theſe Parts, which being hot and moiſt, are very ſubject to it; becauſe the Womb ſerves as a Sink, by which all the ill Humours of the Body are purged; ſo that you muſt take great Care, that theſe kind of Tumours turn not to a Cancer, which is a very miſchievous Malady, and cauſeth the poor Women miſerably to languiſh, which are afflicted with it, and which after many inſupportable Pains, brings them almoſt always to an inevitable Death.

When

When the *Vagina* is not clear in its Capacity, becauſe of any Scar after a Rent, cauſed by ſome Force or Violence to the Woman, or of ſome hard Labour, or after an Ulcer, which cauſed the two Sides to be agglutinated, whether inwardly or outwardly, it muſt be ſeparated the beſt that may be with a * *Biſtory*, or ſome other Inſtrument, according as the Caſe requires, hindering, by interpoſed Linnen, that it do not again agglutinate.

* *A Kind of large Inciſion Knife.*

When a Woman hath no *Vulva*, or outward Entry of the Womb pierced, which is very rare, it muſt be opened, by making a long Inciſion.

Fabricius recites the like Caſe in a Girl of thirteen Years of Age, like to die of it, becauſe her Terms could not come down, there being no Perforation; wherefore he did the like Operation, which ſucceeded very well, and made her by that means capable of Generation. As to the inward Orifice of the Womb; if it be diſplaced either towards the Back or Sides, it may be in ſome ſort remedy'd, by making the Woman to obſerve, in the Act of Generation, a convenient Poſture, that the Man's Seed may be ejaculated toward the Orifice; and if the Whites, or other Impurities of the Womb cauſe Barrenneſs, as it is for the moſt part by the Diſcharge of the whole Habit on this Place; it muſt be helped by Evacuations, Purgations, and a regular Diet, according to their different Cauſes and Qualities of theſe ill Humours.

Having thus diſcovered the moſt certain Signs of Fertility, and the Marks of Sterility, I will now (the bettter to purſue the Order I have propos'd) treat of Conception.

CHAP.

CHAP. II.

Of Conception, and the Conditions neceſſary for it.

IT is moſt certain, according to the Rule of Nature, that a Woman is incapable of conceiving, if ſhe hath not the Conditions requiſite for Fruitfulneſs: We have mention'd them in the foregoing Chapter; let us now examine in this, what is Conception, and how cauſed. Conception is nothing elſe but an Action of the Womb, by which the prolifick Seeds of the Man and Woman are there received and retained, that an Infant may be ingendred and formed out of it. There are two ſorts of Conceptions; the one true according to Nature, to which ſucceeds the Generation of the Infant in the Womb: the other falſe, which we may ſay is wholly againſt Nature, and there the Seeds change into Water, falſe Conceptions, Moles, or other ſtrange Matter.

The Qualifications requiſite for a Woman to conceive according to Nature, are, that the Woman receive and retain in her Womb the Man's and her own prolifick Seed, without which it cannot come to paſs; for it is neceſſary that both Seeds ſhould be there. Nor is it at all true what *Ariſtotle* and ſome other of his Followers affirm, that the Woman neither hath nor can yield Seed; a great Abſurdity to believe: For the contrary may eaſily be diſcovered, by ſeeing the Spermatick Veſſels and Teſticles of a fruitful Woman, appointed for this Uſe, which are wholly filled with this Seed, which in Coition they diſcharge as well as Men. Such as will not open their Eyes to behold a Verity ſo clear, may make Reflection on the Reſemblance of Infants to their Mother, which could not be unleſs her Seed had been more predominant than the Father's, when he begot them; which likewiſe hap-

happens after the same manner, when the Father's hath more Force and Virtue. Which may evince, that the Woman's Seed contributes as well to the Formation of the Infant as the Father's. If they will not agree to a thing so common, let them make another Reflection on the Generation of certain Animals, participating of the Nature of the Male and Female (of which they are engendred) tho' of different kind: as we daily see Asses and Mares produce, by their coupling, Mules, Animals of a middle Nature, resembling the one and the other that produced them. We may then learn by this, that both Seeds are necessary for a true Conception, provided they be prolifick, that is, containing in them the Idea of all the Parts of the Body, and then the Womb being greedy of it, delights it self in it, and easily retains it when received, else it soon afterwards rejects it.

It is not absolutely necessary, that both the Seeds be received and retained intire, without the loss of some Part; for provided there be a moderate Quantity, 'tis sufficient: Nor must we imagine, that (though all of it be not received into the Womb) the Child, formed out of it, will want some Limb, as an Arm, Leg, or other Member, for want of sufficient matter: Inasmuch as the forming Faculty is whole in every part of the Seed, of which the least Drop contains in it potentially the Idea and Form of all the Parts, as we have lately made appear: But indeed when the Seeds are received but in small Quantity, the Child may be the less and weaker for it: Or, if either, or both of them have not the requisite Qualities: or though well enough conditioned, if the Womb be imbued and stuft with ill Humours, as the Menstrues, Whites, and other Filth or Fault: if then there be a Conception, it will be contrary to Nature, and there will be ingendred false Births, Moles, or Dropsies of the Womb, mixed with some other strange

Bodies

Bodies, which are very troubleſome to Women till they void them.

It is therefore without Cauſe, that Women are blamed, when their Children are born with red and livid Spots, which very much disfigure the Faces of ſome of them: It is uſually ſaid (but without reaſon) that this proceeds from the Mother's longing to drink Wine; for though ſome have, by chance, been in effect harraſſed (as they affirm) with theſe paſſionate Deſires during their being with Child, yet we muſt not ſuperſtitiouſly believe (as many do) that theſe Spots are ſo cauſed, but rather from ſome other Cauſe, which muſt be ſearch'd for elſewhere; And that which makes it appear, it cannot proceed from hence, is *, that almoſt throughout all *Italy*, where nothing but White-Wine is drunk, as alſo in *Anjoy* in *France*, I have ſeen divers Perſons marked with theſe red Spots: And in caſe it proceeded from their Mother's longing to drink Wine, they ought to be white Spots, or of an Amber Colour, being the Colour of the Wine of theſe Countries: But we ought rather to conclude, that they are cauſed from ſome extravaſated Blood, at the time the Infant is formed; which marks the Skin, yet very tender, with theſe Spots, and colours it in whatſoever part it toucheth, much after the ſame manner as we ſee it marked with Gunpowder, or ſome Waters producing the like Effect, when it is waſh'd and bathed with them. I will not however deny that the Imagination hath a Power to imprint on the Body of the Infant Marks of this Nature; but that can only be when young with Child, and principally at the very Moment of Conception; for when the Child is compleatly formed, the Imagination can in no wiſe change its firſt Figure; and Women muſt wean themſelves from theſe vain Apprehenſions, which they ſay they have to ſuch things (every Moment) and ſerves ſome of them for

* *No good Reaſon.*

for a Pretext to cover their Liquoriſhneſs.

Since my Diſcourſe is fallen on this Subject of Marks, with which oft-times the Bodies of Infants are ſpotted in their Birth, and comes, as is ordinarily believed, from the Imagination of their Mothers, it ſeems to me not much from my Purpoſe, to recite a Circumſtance very particular, found on Me when I came into the World, as my Father and Mother have often told me, which is, that my Mother being with Child of me, and almoſt at the end of her Reckoning, as it appear'd afterwards, the eldeſt of her three Sons (which ſhe then had of ſix Years old, and her Firſt-born, whom ſhe loved with an extraordinary Tenderneſs and Paſſion) died in ſeven Days of the Small-Pox, all which time ſhe continued Night and Day by his Bed-ſide, tending him in all his Neceſſities, not ſuffering any other to do it, whatſoever Deſires were made unto her, not to weary and trouble her ſelf, as ſhe did, for the Child's Sickneſs, alledging, that in her preſent Condition ſhe ought to be careful of her ſelf, and not be the Cauſe of Death to the Infant ſhe went with; in fine, at the end of ſeven Days her Son died, upon which the next Day ſhe was delivered of me, who brought effectively into the World with me ſix or ſeven of the Small-Pox. Now it is certain, that it would be * irrational to ſay, that I had then contracted theſe Small-Pox in my Mother's Womb, by her ſtrong Imagination: But if I were asked whence they proceeded? I ſhould anſwer, that the contagious Air ſhe breathed, without Diſcontinuance, during the whole Sickneſs of her deceaſed Son, had ſo infected the Maſs of her Blood, with which at that time I was nouriſhed, that I, rather than ſhe, eaſily received the Impreſſion of this Contagion, becauſe of the Tenderneſs of my Body.

† Let us therefore aſſert, that the Imagination cannot produce any of

* *Why ſo?*

† *Experience ſhews the contrary.*

the

the above-mentioned Effects, but at the Moment of Conception, or within few Days after, and that we ought for the moſt part to ſearch elſewhere (if we deſire the Truth of it) the Cauſe of moſt of theſe Spots, Marks, and Signs, with which many Infants are born.

CHAP. III.

Of the Signs of Conception.

AS it is very hard, and belonging only to expert Gardiners, to know Plants as ſoon as they begin to ſpring forth of the Earth; ſo likewiſe there are none but expert * Chirurgeons can give a Woman certain Aſſurance of Conception from its Beginning: altho ſome of theſe Signs, reſembling thoſe of the Suppreſſion of the Terms and other Maladies in Women, cauſe many to be deceiv'd in it.

* *Chirurgeons only practiſe Midwifery in* France.

I will not trouble my ſelf to make a Recital of a great Number of Signs of Conception, which rather tend to Superſtition, than an effective Verity: But only the moſt eſſential and ordinary, by which a Chirurgeon may be aſſured of it; of which ſome may preſently be perceiv'd, others not till afterwards. He may firſt examine and inform himſelf, whether the Woman hath all or moſt part of the Signs of Fertility, already named in the Diſcourſe of them; if not he muſt impute them to ſome other Cauſe; and ſuppoſing her fruitful, you may then know whether ſhe have conceived, by this Agreement, and more than ordinary Delight in the Act.

It is not enough for a Woman to be certain ſhe hath conceived, and to yield and receive her Seed with the Man's into her Womb, unleſs it cloſe at that inſtant, and retain it. There is an Article amongſt the Cuſtoms of *Paris*, in which it is ſaid, *That to give*

and

ly, to others by Accident, as by some Callosity proceeding from an Ulcer, or other Malady.

If all these Signs of Conception (which sometimes may deceive us, though rarely, if when they concur) do not give us a sufficient Assurance of it, but that we desire a better, *Hippocrates* teacheth us a way to know it; which I believe to be no more certain than the rest; it is in his 42d Aphorism of his 5th Book, where he speaks in this sort, *Si velis noscere, an conceperit mulier, dormituræ, aquam mulsam potui dato: & si ventris tormina patiatur, concepit; sin minus, non concepit:* If you desire to know whether a Woman hath conceived or no, give her, going to Rest, a Draught of Metheglin; and if afterwards she feels Pains in her Belly, caused by Wind, she hath conceiv'd; if none, she hath not, as he saith: Which is grounded (as I believe) upon the Supposition that Metheglin breeds Wind, which cannot pass easily downwards, because the Womb (being full) compresseth with its Greatness the * *Intestin rectum*, on which it is situated, and causeth those Winds to rumble, which are constrained to recoil back into the other Intestines.

* *The Great Gut.*

If there be any Occasions where Physicians or Chirurgeons ought to be more prudent, and to make more Reflections upon their Prognosticks for an Affair so important as this is, it is in this which concerns their Judgments as to Conception, and Women being with Child, to avoid the great Accidents and Misfortunes, which they cause who are too precipitate in it without a certain Knowledge. The Faults committed through too much Fear at such a time, are in some sort excusable, and to be pardoned; but not those caused by Temerity, which are incomparably greater. There are but too many poor Women who have been caused to miscarry, by Medicines and Bleeding, not believing they were with Child, which are so many Murders they are guilty of who caused it, either through Ignorance or Rashness; besides the Death which they

bring to those little innocent Creatures, by destroying them in their Mother's Belly, they often thereby put the Mothers into great Danger. We have lately had in *Paris*, in the Year 1666, a miserable Example of this kind, in a Woman hanged, and afterwards publickly dissected, near the Kitchen-Court of the *Louvre*, who was found four Months gone with Child, notwithstanding the Report of such Persons as visited her by the Judges Order before her Execution, who affirmed, contrary to Truth, that she was not with Child. They were deceived, because the Woman had her Monthly Courses, though with Child. Wherefore 'tis not fit to be too confident, forasmuch as there are many with Child who have their Courses; and I have known some who have had them all the time of their great Belly till the fifth or sixth Month, which happens according to the Woman's being more or less sanguine; though the greatest Number usually have them not: But there are very few general Rules which may not sometimes be excepted against.

This Accident made such a Noise in *Paris*, that it quickly came to the Knowledge of the King and all his Court, who very much blamed them, that by their Ignorance had caused the precipitate Execution of this poor unfortunate Creature, with whom perished the Infant, innocent of the Mother's Crimes. Nor must the Chirurgeon much trust to what these sort of Women may tell him concerning it; for, being afraid of the Punishment of their Crime, to delay it, do almost all say they are with Child, which is a Reason very considerable, why the Persons to whom such Matters are committed, should be very knowing. There are yet another sort of Women, who having been ill-treated, send for the Chirurgeon, that he may give them a Certificate, the better to be reveng'd on their Adversary; which that they may the easier obtain, they also affirm themselves with Child, and having receiv'd Blows on their Belly, feign they feel great Pain, and

if

if by chance they have at that time their Courſes, they endeavour to perſwade it is a flooding, or ſhowes, wherefore he muſt be careful not to be deceiv'd; and yet, that he may not be eſteem'd ignorant, nor fall into the like Diſgrace, when there is any Cauſe of Doubt, it is better to delay a little, than raſhly to pronounce his Prognoſtick at a venture. For as there are Women who would be thought to be with Child, though they are not; ſo there are others who will deny it, till they are brought to Bed, as in this following Example. About the Year 1654. being in the City of *Saumur*, there was near my Lodging a young and very handſome Daughter of a Citizen, who was five whole Months under a Phyſician's and Apothecary's Hands, to be cured of a Dropſie which ſhe complain'd of: At length, after ſhe had taken many violent Remedies they had order'd her, ſhe was cured in a moment, by bringing forth a Child at its full time, notwithſtanding all they had given her; which much aſtoniſhed the Phyſician and Apothecary to be ſo groſly deceiv'd, in truſting to the Maid's Relation, who counterfeited the Dropſy ſo well, that they could never perceive the Truth till ſhe was brought to Bed.

Some Women themſelves are deceiv'd in their being with Child, as lately the Wife of a Counſellor of the Court, who after having been in a Courſe of Phyſick ſix or ſeven whole Months for the Dropſy, under an eminent Phyſician, was at length brought to Bed of a Child.

I know another Woman, a Timber-Merchant at *Paris*, who never had a Child, though ſhe ſo paſſionately deſired it, as to be at the point of hoping for one at 55 Years of Age, under the Colour that ſhe had ſtill her Courſes. This Woman was once perſwaded (upon the Recital of ſuch Signs as ſhe ſaid ſhe had) for the Space of ten whole Months, that ſhe was with Child, of which the Midwife and many others aſſured her, and ſhe her ſelf likewiſe believed it (for it is eaſy to be

perſwaded to believe what one hopes for with a ſtrong Paſſion) ſhe had a big Belly, and ſaid alſo, that ſhe felt the Child ſtir; and believed it ſo truly, that finding her ſelf one Day worſe than ordinarily (after having prepared very fine Neceſſaries for the Child, ſhe imagined ſhe went with) ſhe ſent for the Midwife, who when ſhe was come, aſſured her it was her Labour; but the next Day (having always till then expected a Child) ſhe voided only a Quantity of Water, with ſome Wind from the Womb, and nothing elſe: After which ſhe was forced to fold up her fine Toilets again, which ſhe had provided. By theſe Examples we may learn not to be too ready to rely upon Women's Relations, if there be no Reaſon for them; which may be known by the Examination of the Signs already declared.

Now ſince after Conception (of which we have juſt done ſpeaking) there follows Generation, let it be conſidered what it is, and how it is performed.

CHAP. IV.

What Generation is, and what is neceſſary to it.

IT is a very great Truth, and generally known, That whoſoever is in this lower World, is ſubject to Corruption, and at length conſtrained to ſuffer Death: Which hath obliged Nature, provident and careful of its Preſervation, to endue all Things with a certain Deſire of eternizing themſelves, which being impoſſible in Individuals, becauſe mortal through an indiſpenſable Neceſſity, is therefore done by the Propagation of their Forms and Kinds. She obtains her end, in reſpect of Animals, by the means of Generation ſucceſſively reiterated: For ſo all Creatures

tures seem to immortalize themselves, in some Sense, by producing their like. And Fathers imagine themselves not quite dead, if they leave their like behind them after their Death, to wit, their Children.

By Generation, we understand generally, a Progress of that which is, to that which it is not. But this Definition is a little too ample for to discover what we desire concerning Generation of perfect Animals, and chiefly of Mankind: Wherefore that our Intention may be the easier conceived, we must search some other, or rather a Description, which may more exactly discover the Thing: To this purpose we may say, that by the Generations of Mankind, we mean a proper and particular Action of the Womb; by which working upon both Seeds there retained, it forms and shapes a Body out of them, composed of divers Parts, which it disposeth in order, to become in time the Organ of the Soul, which must be * infused into it. There are many Things requisit to make Generation perfect, without which it would be wholly and absolutely impossible: There are usually Three principally reckoned, to wit, Diversity of Sex, Congression, and Mixture of both Seeds. Which we will a little particularly examine, although some define a Woman to be an Animal which can engender in it self, and that this may be true; yet it is most certain, that she cannot engender without a Man to discharge his Seed into her Womb. And though we daily see Pullets lay Eggs, and other Fowl, without Cocks treading them; yet those Eggs there will never become Chickens, because the Male never made an Impression on them, nor gave them this prolifick Virtue, absolutely necessary to this purpose. Which may convince us that Diversity of Sex is necessarily requisite, as well to those Animals, as to the more perfect Man.

* *This not allowed by all Philosophers.*

Diverſity of Sex would profit little, if Copulation did not likewiſe follow; though ſome ſubtile Women, to cloke their Shamefulneſs, endeavour to perſwade that they were never touch'd by Man to get them with Child, as ſhe, mentioned by *Averroes*, who conceived in a Bath wherein a Man had waſh'd himſelf a little before, and ſpent his Seed in it, which was drawn and ſuck'd in (as he ſaith) by the Womb of this Woman: But this is a Story fit to amuſe little Children.

Now to the End theſe different Sexes ſhould be obliged to come to this Touch, which we call Copulation, beſides the Deſire of begetting their like, which naturally incites them to it, the Parts of Men and Women deſtined to Generation, are endued with a delightful and mutual Itch, to ſtir them up to the Action, without which it would be impoſſible for a Man (ſo divine an Animal) born for the Contemplation of Heavenly Things, to join himſelf to a Woman, in regard of the Uncleanneſs of the Parts, and of the Act: And on the other ſide; if Women did not think of a thouſand Pains and Inconveniencies which their great Bellies cauſe them, of the Pains they endure, and the Hazard of their Lives when they are in Labour; to which may be added the Loſs of their Beauty, which is the moſt precious Gift they have, and makes them beloved by thoſe that poſſeſs them, certainly it might alſo affrighten them from it: But neither the one nor the other make theſe Reflections till after the Action (whence comes the Saying, *Poſt coitum omne animal triſte*) conſidering nothing before but the mutual Pleaſure they receive by it. It is then from this voluptuous Itch, and the Deſire of begetting their like, that Nature obligeth both theſe Sexes to this Congreſſion.

As to the Mixture of both Seeds; it is certain that the Diverſity of Sexes, and their Congreſſion, are only to this end, without which Generation cannot be; tho' ſome would have Women's Seed

ſerve

ſerve to no purpoſe; yea, that they neither have, nor eject any, as *Ariſtotle* ſaith: But we have proved the contrary in the Chapter of Conception, by the Example of daily Experience, to which you may have recourſe, to avoid Repetition.

All theſe three Circumſtances, to wit, the Diverſity of Sexes, Congreſſion, and Mixture of their Matters, called Seeds, muſt precede Conception, to which ſucceeds Generation, on this faſhion: As ſoon as the Woman hath conceived, that is, hath received and retained in her Womb the two prolifick Seeds, it is every way compreſſed to imbrace them cloſely, and is ſo exactly cloſed, that the Point of a Needle (as ſaith *Hippocrates*) cannot enter it without Violence: After which it reduceth, by its heat, from Power into Action, the ſeveral Faculties which are in the Seeds it contains, making uſe of the Spirits with which theſe frothy and boyling Seeds abound, and are as Inſtruments wherewith it begins to trace out the firſt Lineaments of all the Parts, to which afterwards (making uſe of the menſtruous Blood flowing to it) it gives in time Growth, and final Perfection.

Generation may be divided into three different Seaſons, the Beginning, Middle, and the End. The Beginning is, when no other Matter is in the Womb but the two Seeds, which continue ſo to the ſixth Day, as *Hippocrates* notes; and calls them for that time the *Geniture*, as much as to ſay, from whence Generation muſt proceed: He ſpeaks of it in his Book, *De Natura Pueri*, and ſaith, that by the Experience he brings of it, one may judge of the other times. He relates a Story of a Woman, which at ſix Days end caſt forth, with a Noiſe at once out of her Womb, the Seeds ſhe had conceiv'd, reſembling a raw Egg, without a Shell, having only the ſmall Skin over it; or, to the abortive Eggs, which have no Shell: Which little Membrane was on the out-ſide a

little coloured with red, and involved in it this Seed, which was of a round Figure; in the internal Part might be seen white and reddish *Fibres*, with a thick Humour, in the midst of which was found something like the umbelick Vessels. *Hippocrates* calls this first time of Generation, *Geniture*, as is already mentioned, during which time neither Figure nor Distinction can be observed, but only some beginning of a Disposition to receive the Form of the Parts; after which follows the second time, beginning where the first ends, that is, at the sixth Day, and lasts to the 30th. The time that the same *Hippocrates* assures us the Males are compleatly formed, and the Females not till the 42d. After the first six Days are past, and the Womb hath wrought, according as we have explained, upon the Seeds, which are there yet without any Mixture of Blood, tho' disposed to receive it; it is brought thither, in some sooner, in some later, according to the Woman's being near or further from her time of having her Courses when she conceived, which produceth Effects according to these different Dispositions: For if they flow too soon, or in too great Abundance, as it befals such as conceive at the point of having their Purgations, the Seeds are drowned and corrupted by it, which often causeth a Flooding, or at least the Generation of a false Conception; but if they are far from their having them, the Conception is so much the more stable. Now then this Blood distilled by little and little into the Womb of the Woman, who hath sometime since conceived, serves as a fit Matter to form and figure out all the Parts of the Infant, only traced out by the Seed; and yet doth it (according to my Opinion) much like a Painter, who after he hath drawn the Out-lines with a Chalk upon his Cloth, begins to lay Colour upon Colour, to paint by Degrees all the Parts of the Person whose Picture he draws. Some little Space after the Beginning of this second time, appears, as it were,

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the Figure of those three Bubbles, of which *Hippocrates* speaks, or rather three Masses of this Matter, which grosly represent the three Parts, called Principal; the first composeth the Head; the second, in the Middle, the Heart; and the last the Liver; there may be likewise seen the After-birth, with the umbilick Vessels fastned to it, and the Membranes which wrapt up the whole; after which, from Day to Day, all the other Parts of the Body are figured in such sort, that at thirty Days end the Males are compleatly formed, and the Females the 42d Day ordinarily, which is about the time the *Fætus* begins to be animated, though as yet there is no sensible Motion.

Hippocrates seems by these different Terms to be of an Opinion, that the Males have sooner Life than the Females, because (he saith) their Heat is greater; but for my part, I do not believe the Male is sooner form'd than the Female, and that which so perswades me, is, because, if it was so, the Male must likewise be at its full Term sooner than the Female, proportionable to the same time, that the one is animated sooner than the other; which we see the contrary, in that Women are brought to Bed indifferently both of Sons and Daughters, at the ordinary Term of nine Months. Therefore towards the fifth or sixth Week, as well Males as Females, have all the Parts of their Body (though small and very tender) entirely formed and figured, at which time it is no longer than a Finger; and from thence-forwards, which is our third time, the Blood flowing every Day more and more to the Womb (not by intervals, as the Courses, but continually) it daily grows bigger and stronger to the End of the ninth Month, being the full Term of ordinary Labour. Having explicated Conception and Generation, let us now consider Pregnancy, and the several sorts.

CHAP.

CHAP. V.

Of Pregnancy, and the different ſorts; with the Signs of the true and falſe great Bellies.

THE great Belly of a Woman, properly taken, is a Tumour cauſed by an Infant's Situation in the Womb. There are natural great Bellies, containing a living Child, and theſe we call true; and others againſt Nature, in which, inſtead of a Child, is ingendred nothing but ſtrange Matter, as Wind mixed with Waters, which are called Dropſies of the Womb, falſe Conceptions, Moles, or Membranes full of Blood and corrupted Seed; for which Reaſon they are called, falſe Great-Bellies. We have already, treating of Conception and Generation, mentioned the Cauſes and Signs of a Great-Belly in its Beginning, notwithſtanding we will again repeat the moſt certain and ordinary of them, as, Nauſeouſneſs, Vomitings, Loſs of Appetite to things the Woman was accuſtomed to eat and like; Longings for ſtrange and naughty things; Suppreſſion of the Terms, without Fever or Shiverings, or other Cauſe; Pains or Swelling of the Breaſts; all which may be found in Virgins, by the Retenſion of their Courſes: But the moſt certain is, if putting the Finger into the *Vagina*, you perceive the inward Orifice exactly cloſe, as alſo the Diſtention of the Body of the Womb conſiderable, more or leſs, according to the time the Woman is gone with Child, and the Child's ſtirring in the Womb; theſe give us indubitable Proofs of it: We ſhould be always careful not to be deceived by what we feel ſtir in the Womb, foraſmuch as the Infant of it ſelf hath a total and a partial Motion; the Total is, when it removes the whole Body; and the partial is, when it moves but one part at a time, as Head, Arm, or Leg, the reſt

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of the Body lying ſtill: But the Woman blown up in Fits of the Mother, yea, and ſome Moles have by accident a kind of total Motion, but never a partial one. That of a Mole is rather a Motion of falling down than otherwiſe, as heavy Things fall downwards: For a Woman who hath a Mole of any Bigneſs conſiderable, whatſoever ſide ſhe turns her ſelf to, her Belly falls immediately the ſame way, like a heavy Bowl. About the time (or very near) when the Infant quickens, if the Woman be certainly with Child, theſe Humours (which are carried to the Breaſts by the Stoppage of the Courſes) are turned to Milk, which when it happens, is uſually an aſſured Teſtimony of Pregnancy; though ſome Women have been found with Milk in their Breaſts, (but rarely) and yet not with Child, nor ever having had any; which *Hippocrates* alſo confirms in his 39*th* Aphoriſm of his 5*th* Book, where he ſaith, *Si mulier quæ nec pregnans, nec puerpera eſt, lac habit, ei menſtrua defecerunt.* If a Woman hath Milk in her Breaſts, and is neither with Child, nor every had any, it comes from the Stoppage of her Courſes. But this is rather Whey than Milk, not having the Conſiſtence as the Milk of a Woman in Child-bed; nay, the Milk of a Woman with Child is yet but wateriſh, and becomes neither thick nor very white, till after Labour ſhe begins to ſuckle her Child.

The Infant moves it ſelf manifeſtly about the fourth Month; or ſooner or later, according as it is more or leſs ſtrong: Some Women feel it from the ſecond, others about the third Month, yea ſome before that time. In the Beginning theſe firſt Motions are very ſmall, and very like to thoſe of a little Sparrow when firſt hatch'd, but grow greater, proportionably as the Infant grows bigger and ſtronger, and at laſt are ſo violent, that they force the Womb to diſcharge it ſelf of its Burden, as in Travail. The common Opinion is, that the Males quicken before the Females, be-

because their Heat is greater, but that is almost equal; for there are some Women perceive their Daughters, others their Sons soonest, which happens indifferently to Males and Females, according as there was a more or less vigorous Disposition at their Generation. Very often Women, who daily use Copulation, are subject to be deceived; for they usually believe they are with Child if their Courses stop, and withal are a little qualmish, which is not always true; for false Conceptions cause almost the same Accidents as true; and cannot easily be distinguish'd but by the Consequences. This false great Belly is, as we have already said, often caused by Wind, which blows up and distends the Womb, and which Women oft-times discharge with as much Noise as if it came from the Fundament: Sometimes it is nothing but Water gathered there in such Abundance, as some have been seen to void a Pailful without any Child; though they verily believed they were with Child, as did that Wood-Merchant, whose Story you have in the End of the Third Chapter, who did not void it before the End of the tenth Month, till when she always believed her self with Child. There are others who conceive only false Conceptions and Moles, which may be known by the Infant's different Motions, already mentioned, and by the Moles continuing in the Womb often after the ordinary time of Labour, some Women having them a whole Year, yea many Years, according to these Moles, are more or less adhering to the inner Parts of the Womb, and are there entertained and nourished by the Blood that flows thither.

Moles always proceed from some false Conceptions, which, continuing in the Womb, increase gradually there by the Blood that flows to them: If the Womb expels it before two Months, it's called a false Conception, and some are only but as it were the Seed involved in the Membrane, like that Geniture which that Woman voided after six or seven Days, of whom

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Hippocrates ſpeaks in his Book, *De natura Pueri.* The others are a little more ſolid and fleſhy, reſembling in ſome ſort the Gizard of a Fowl, and are greater or leſs, according to the time they ſtay in the Womb, and alſo according to the Quantity of Blood with which they are always ſoaked. Women expel theſe falſe Conceptions ſooner or later, according as they cleave to the Womb, which makes them almoſt always flood in great Quantity at thoſe Times.

It is of great Importance to diſtinguiſh well between a true and a falſe Belly; for the Faults committed by Miſtake, are ever very conſiderable: Foraſmuch as in a true great Belly the Child ought to continue in the Womb, till Nature * expels it by a natural Labour: But contrarily, the falſe Great Belly indicates to us, the Expulſion of what it contains as ſoon as may be: Wherefore we ought to be very careful.

* *This excludes not Art to aſſiſt Nature, if not able to perform its Duty in due Seaſon.*

CHAP. VI.

How to know the different Times of Pregnancy.

AS Prudence is neceſſary to enable a Chirurgeon or Midwife to aſſure a Woman that ſhe is with Child, or not, and of a true or falſe Conception; ſo it is likewiſe as much for them to know how far ſhe is gone, to the end they may be certain whether the Infant be yet quick or no, which is of great Moment: Becauſe, according to the Law, if a big-bellied Woman miſcarry by a Wound, he that ſtruck her deſerves Death, in caſe the Child were quick, otherwiſe he is only condemned in a pecuniary Puniſhment: They ought likewiſe to take heed leſt they cauſe the Death of the Infants, and ſometimes of their

their Mother, by haſtening * their Labour before its time, imagining that when a big-bellied Woman complains of great Pains in her Back and Belly, they are Pains of Labour, and inſtead of endeavouring to hinder, they contrarily provoke them, and cauſe to miſcarry unfortunately before their time. I knew a Woman, called *Martha Rolet*, being ſix Months gone with Child, or thereabouts, was ſurprized with great Pains much like throws of Labour, which made her ſend for her Midwife, who as ſoon as ſhe was come, and underſtanding the Caſe no better than they uſe to do, endeavoured all ſhe could to bring her to Bed, augmenting her Pains by ſharp Clyſters, making her walk about her Chamber, as if ſhe had been at her full time; but finding at two Days end no Forwardneſs, notwithſtanding the continual Pains, ſhe ſent for me to know what was fit for her to do in that Caſe: I went to the Woman, and found the inward Orifice of the Womb dilated enough for the top of my little Finger to enter into its inward Part, and yet wider towards the outward Part; but conſidering that ſhe had no other Accident but thoſe Pains, I cauſed her immediately to go to Bed, where ſhe continued eight or nine Days, in which time her Pains ceaſed, the Womb cloſed exactly, as I found ſome Days after, and ſhe went on with her Child three full Months longer, and was then brought to Bed of a Daughter at the full time, ſtrong and robuſt, yet living, and now five Years old, or thereabouts. Now had I purſued what they began, this Woman without doubt would have miſcarried at ſix Months, for it would have killed the Infant in her Belly, and ſoon after ſhe muſt have miſcarried. It is fit to follow this Example in the like Occaſion, provided the Pains are not accompanied with Accidents, which may endanger the Life of the Mother if not preſently delivered; as frequent Convulſions, conſiderable Floodings, of which we ſhall ſpeak in its Place.

* *By Medicines.*

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To be well informed of the different times of Pregnancy, the Woman's own Relation may ſometimes ſerve turn, yet 'tis not fit always to truſt it; it may help to conjecture, becauſe many Women are themſelves deceived, concluding themſelves with Child, from the ſtaying of their Courſes, or from their Quickning, which is not always a certain Rule. We uſually judge by the Bigneſs of the Belly: But more ſurely by touching the inward Orifice of the Womb. When they are young with Child, we can only know it by the Signs of Conception, becauſe what is then in the Womb is of no conſiderable Bigneſs to ſwell a Belly; but rather on the contrary, at that time it grows flatter, for the Reaſons before recited: But after the ſecond Month the Belly begins by Degrees to wax bigger, till the ninth Month. At the Beginning, in touching the inward Orifice, you find it exactly cloſe and ſomewhat long, reſembling the Muzzel of a Puppy new pup'd; and is then very thick: But by little and little, through the Extenſion of the Womb, it diminiſheth ſo in all its Proportions, that when the Woman cometh near her Reckoning, it is perfectly flat, and almoſt equal with the Globe of the Womb, ſo that it becomes like a ſmall Circle, a little thick at its Entry, where the Garland is made at the time of Labour.

Neither may the time of Pregnancy be always judged by the great ſwelling of the Belly; becauſe ſome are bigger when they are half gone, than others at their Reckoning: it depending much on the Bigneſs of the Infant, and their Number; and yet again, as there is more or leſs Water incloſed with them in the Womb; but much rather by the internal Orifice, which grows daily thinner and flatter, and ſo much the more by how much a Woman comes nearer her Reckoning: Much in the ſame manner as a tender Skin diminiſhes in Thickneſs, according as it is extended and dilated; even ſo this Orifice grows thinner

thinner by the Extension which the Head of the Infant causeth to it, usually pressing hard against it the last Months. This Remark is often useful to us in the Admission of big-bellied Women, that desire to lie in the * *Hostel de Dieu* at *Paris*, which I very often observed in my Practice there of Deliveries in the Year 1660, through the Permission which my Lord, the first President, was pleased to give me, (for there is no place so fit to perfect one in a short time, in the Practice of so necessary an Operation, because of the great Number there daily delivered of all sorts) the Order is, that any Women with Child shall be there charitably received fifteen Days, or thereabouts, before their Reckoning; to which Purpose they are search'd before they are admitted, because many, glad of a good Entertainment for nothing, present themselves there two or three Months before they should, saying and affirming they are near their time; but by the above-mentioned Considerations, one may easily judge and know within a very little, who are fit to be received, and who not, when they are near their time; and by this means may likewise know when 'tis necessary to forward Labour, or retard it, as much as ought to be, when Women are not yet gone their full time.

* *An Hospital so called, in* Paris.

As to what respects the several Terms, to which a Woman may go with Child; there is a great Controversie amongst Authors, but all agree that the most ordinary Terms are either the seventh or the ninth Month, which is known and also approved by all. *Hippocrates* is of an Opinion, that a Child born in the eighth Month cannot live, because he cannot support two such puissant Endeavours so near one to another, having already endeavoured to be born the seventh Month, which is (as he saith) the first legitimate Term of Labour; and failing then, if, reiterating the same Endeavours the eighth Month, he be

born,

born, he is thereby so weakned, that he seldom lives, as he often doth, when born by the first Endeavours in the seventh Month, his Strength not being before exhausted by vain Attempts. This seems very likely to many: But if they that practise Deliveries, make a true Reflection, they will find, that it is the Matrix alone, assisted with the Compression of the Muscles of the lower Belly and *Diaphragma*, which cause the Expulsion of the Child, being stirred up by its weight, and not able to be further extended to contain it; and not, as is ordinarily believed, that the Infant (being no longer able to stay there for want of the Nourishment and Refreshment) useth his pretended Endeavours to come forth thence, and to that purpose kicking strongly, he breaks with his Feet the Membranes which contain the Waters, inasmuch as when the Child is naturally born, the Membranes are always rent before the Head, which pressing and thrusting each Throw the Waters before it, causeth them to burst out with force. The same *Hippocrates* likewise admits the tenth Month, as also the Beginning of the eleventh, at which time he saith the Children live: But he will by no means that Children can live if born before the seventh, forasmuch as they are then too feeble, and not capable to support the external Injuries, as indeed we see and find it every Day.

I do boldly affirm, and it is also very true, that the ordinary Term of going with Child is nine whole Months: But I cannot consent that Children born in the seventh Month, do oftner live than those in the eighth; but much to the contrary I believe, that the nearer they approach to the natural Term of nine Months, the stronger they are; and therefore that Children born in the eighth Month rather live than those of the seventh: Which is wholly contrary to the Opinion of many Persons, who blindly follow in this the Sense of *Hippocrates* and all Authors, without making any Reflection upon the thing, to disabuse them-

ſelves of this Vulgar Belief, founded on the pretended vain Endeavours, (which they ſay) are made by the Infant in the ſeventh Month: For, as there are not only in the ſame Country and Field, but alſo on the ſame Vine, Grapes, ſometimes ſix Weeks ripe before their ordinary ſeaſon, and others not till above a Month after, which happens according to the Soil, the different Regards of the Sun, and cultivating of the Vine: So likewiſe we ſee Women brought to Bed of their Children ſix Weeks and two Months before, and ſometimes as long after their ordinary term; whether it is that the Womb being incapable of an Extention beyond a certain Degree, cannot bear its Burden, but a little while after the Reckoning is out, although there have been Women, as *Hippocrates* acknowledgeth, who have gone ten or eleven whole Months with Child, which notwithſtanding is ſo much the more rare, by how much it exceeds its Limits. Theſe things happen alſo to Women, according to the different Diſpoſitions either of their whole Body, or of their Womb alone, or as well according to their way of living, and the greater or leſſer Exerciſe they uſe, and may likewiſe happen on the Child's Part: For Example, if at ſeven Months he is ſo big, that the Womb can no longer contain him, nor dilate it ſelf more without burſting, it is then provoked by the Pain which this violent Extenſion cauſeth, to diſcharge it ſelf of him; and ſo likewiſe in the eighth Month, if there be the ſame Reaſon, and ſome Weeks ſooner or later, according to a Multitude of other Circumſtances; or alſo by any outward Cauſe, as violent ſhaking of the whole Body, Blow, Fall, Leap, or any other whatſoever, haſtning the Pains of Delivery; that which make theſe Children live a longer or a leſſer while, is, according as they are at that time more ſtrong and perfect, and the Woman nearer her time, which is the End of the ninth Month.

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There are many Women that believe they were brought to Bed at the ſeventh and eighth Month; as likewiſe others, that they went ten or eleven whole Months with Child (which may ſometimes be) when notwithſtanding they are effectively delivered at the due time. That which deceives them, uſually is, their believing (as we have already ſaid) themſelves with Child from the time of the Retention of their Courſes, having had them during the two firſt Months of their Pregnancy, yea, and ſometimes longer; and others alſo miſreckon themſelves, when their Courſes are ſtopped two Months before they conceive. It is alſo true that a Woman, though well regulated, cannot exactly know by the Suppreſſion only, the certain time of her being with Child: For Example, if ſhe lies with her Husband upon the Point of the coming down of her Terms, and conceives upon it, then may her Reckoning be from the time of their Suppreſſion, which may come near the Truth: But if ſhe conceives immediately after ſhe hath had them (which happens oftenеſt) and that all along the whole Month ſhe daily copulates with her Husband, at the end of which time her Courſes not coming down, ſhe may very well reckon her ſelf with Child; yet for all this ſhe cannot know by this Sign which Night ſhe conceived, and ſo for three Weeks or a Month, more or leſs, ſhe may be miſtaken in the time.

As Children are more or leſs long-liv'd, according as they approach nearer the ninth Month; ſo it may eaſily be known that they of ſix Months, and much leſs younger, cannot be long-liv'd, becauſe they are yet too weak to reſiſt outward Injuries. There hath often been great Conteſts amongſt Phyſicians to determine, whether a Child born the eleventh or twelfth Month after its pretended Father's Death can be legitimately born, and conſequently admitted to Inheritance, or rather diſinherited as Illegitimate.

This Question hath been as well debated sometimes by the *Romans* as by us, and there have been Parties both for and against this Opinion: For my part, I will, to avoid Prolixity, leave it undecided, and add nothing upon this Point to what I have mentioned before.

CHAP. VII.

Whether it can be known that a Woman is with Child of a Boy or a Girl, and the Signs whether she shall have many Children.

IT is no great matter to satisfie the Curiosity and Disquiet of a Woman, who desires to know whether she be with Child or no; but there are many, if not most, that would have one proceed further, and tell whether it be a Boy or a Girl, which is absolutely impossible; though there is hardly a Midwife that will not boast her self able to resolve it (in effect it is easier to guess, than to find the Truth) for when it happens, it is certainly rather by Chance, than by any Knowledge or Reason they could have to enable them to foretel it. But sometimes one is so pressed and importuned to give Judgment, chiefly by Women who never had Children, and often by their Husbands, not less curious, that one is obliged to satisfie them as much as possible in that Case, by the Examen of some Signs very uncertain.

There are many Signs upon which this Knowledge is grounded (if there can be any, which I do not believe) of which the two principal are taken out of *Hippocrates*; the first is in his 42*d* Aphorism of the fifth Book, which is, *Mulier gravida, si marem gerit, bene colorate est; si vero fœminam, male colorata:* A Woman with Child of a Boy is well coloured; but of

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a Girl, ill-coloured. And the other is in his 48*th* Aphorism of the same Book, which is, *Fœtus Mares dextra uteri parte, fœminæ sinistra magis gestantur:* For the most part the Male Children live in the right side, and the Females in the left. Moreover, they say, a Woman with Child of a Boy is more merry and jocund, bears it much better, is not so disgusted, finds it quicken sooner, and her right Breast fills before the left, and is also more firm, and that all the right Parts of her Body are stronger and more active: As for Example, if she sat, kneeled, or stood upright, she would make her first Step with her right Foot; but if it be a Girl, she would have all the Signs contrary to the above-mentioned.

Some Persons pretend to know it by inspecting Urines, which is as uncertain; for we daily find Women well coloured, and have all the Signs of being with Child of a Boy, and yet are brought to Bed of Girls, contrary to the Hopes given them: And others, tho' they have Signs directly opposite, bring forth Boys. Some believe they understand it better than any other, by considering the Time of Conception; for, say they, if the Woman conceives at the Increase of the Moon, she shall have a Boy, and contrarily a Girl, if at the Decrease: But this falls out as seldom, as may easily be known, by the Observation I have made at the *Hostel de Dieu* at *Paris*, and may be daily observed by others as well as my self; which is, that having in one and the same Day delivered eleven Women there, all at their full time, five of them had Boys, and the other six Girls. Now we may well judge, that they all conceived at one time, because all were brought to bed at the same time; and ought (if this Rule were true, and that they were all governed by this Planet) to have had either all Boys, or all Girls; and not some Boys, and some Girls, as here it happened, and doth every Day in the same Place; whereas in all other Places are indifferently born both Boys and Girls.

Others again believe the Males to be begotten of the Seed which comes rather from the right Testicle than the left, esteeming it hotter, and not so watery, because the right Spermatick Vein comes from the Trunk of the *Vena cava*; and that of the left side takes its Rise from the *Emulgent*; but if they know after what manner the Blood is circulated, they would find that the Blood of the *Emulgent* is not more serous than that of the *Vena cava*, forasmuch as it is purged of its superfluous Serosity by the Reins, before it enters this *Emulgent*; they would likewise know that the Seed of both Testicles is the same exactly, being made of the same Blood, brought to them not by the Reins, but only by the two Arteries, which arise out of the Trunk *Aorta*, otherwise called the great *Artery*; wherefore the left is as well disposed to produce Males as Females; so that those Husbandmen abuse themselves in knitting up one of the Testicles of their Bulls, according as they desire either Males or Females. I know an *Italian* at *Rome* who had only his left Testicle, the right being upon a good Occasion lost; after that Accident married, and begat two Children, which I saw alive, and very well, a Boy and a Girl, besides all he may have begotten since that time: Nor needed he suspect his Wife had the Assistance of any other in that Business, as it very often happens in this Country.

Such as desire to foretel before the Child be born, whether it be a Boy or Girl, do usually adhere by Complacency, to the Desires of the big-belly'd Woman and her Husband in this Case; for if the Midwife knows they desire a Boy, she will assure them it will be a Boy, and swear to it also: And if they wish'd a Girl (as it also happens to some Women, who love Girls best) they will say it shall be a Girl, and lay Wagers of it too. If this luckily succeeds according to her Prognostick, she will not be backwards to affirm she knew it very well: But when it happens contrary

trary to her Prediction, she makes her self reputed ignorant and presumptuous, and remains ashamed.

For my part, I should do quite otherwise; for knowing before-hand the Person's Desires, I should give my Advice always quite contrary; because if it happen to be true (although by chance) what was foretold, they will then conclude me to be knowing, and to have said well; if otherwise (which may be once in twice) the Woman and her Husband obtaining what they desir'd, will not take so much notice of it, because one always receives with a good Welcome what they desire, though unhoped for.

Having shewed that it is impossible to know whether a big-bellied Woman shall have a Boy or Girl, because of the Uncertainty of the Signs upon which they ground their Predictions; We will assert, that it is not the same, whether a Woman is conceived of mote than one. Many Authors have affirmed, that a Woman cannot bring forth above two Children at once, because they have but two Breasts; as also, because there are but two Cavities in the Womb, different from most other Animals, which have many little Cells in it, and also many Teats, wherefore they bring forth many young Ones, usually answering the Number of little Cells of their Womb: This is very true of other Animals, but the Womb of a Woman hath but one only Cavity (unless they would have the two sides taken for Cavities) for there is in the Womb only a simple long Line, without any other Separation.

There are daily Women brought to Bed of two Children at once, sometimes of three, and very rarely four. Yet I knew one Mr. *Herbert*, Couverer of the King's Buildings, who was so good a Couveror, that his Wife about seventeen Years since brought forth four living Children at a Birth; which the Duke of *Orleans*, deceased, coming to hear of, to whom (because of his jovial Humour) he was very welcome; the Duke asked him, in the Presence of divers Persons of

Quality, whether it were true, that he was ſo good a Fellow as to get his Wife with Child of thoſe four at one bout? He anſwer'd very boldly, *Yes; and that he had certainly begat at the ſame time half a Dozen, if his Foot had not ſlipt*; which made them all laugh very heartily.

But I eſteem it either a Miracle or a Fable what is related in the Hiſtory of the Lady *Margaret* Counteſs of *Holland*, who in the Year 1313, was brought to Bed of 365 Children at one and the ſame time; which happen'd to her (as they ſay) by a poor Woman's Imprecation, who asking an Alms, related to her the great Miſery ſhe was in by reaſon of thoſe Children ſhe had with her: To which the Lady anſwered, *She might be content with the Inconvenience, ſince ſhe had had the Pleaſure of getting them.*

Since the moſt uſual Number is two, that Women have, (who have more than one Child at a time) we will give the Signs, which do not appear in the firſt Months, nor ſometimes till they are quick. There is ſome likelihood of it, when a Woman is extraordinary big, and yet ſuſpects no Dropſie; and more, if there be on each ſide of her Belly a little riſing, and as it were a Line a little depreſſed, or not ſo elevated about the Middle; and moſt of all, if at the ſame time one feels many and different Motions on both ſides; and if theſe Motions are more frequent than uſually, which is, becauſe the Infant's being ſtraitned, inconvenience each other, and cauſe that Faſhion-Motion: If all theſe Signs concur, 'tis then very probable the Woman goes with more than one Child.

CHAP.

CHAP. VIII.

Of SUPERFÆTATION.

THere is great Diſpute, whether a Woman (who hath two or more Children at once) conceived of them at one, or at ſeveral Coitions. We ſee indeed daily, that Bitches, Sows, and Rabbets, have divers Young with but one copulating, which may very well make us judge the ſame of a Woman. Some will have this to be by *Superfætation*: But there are Signs by which we may know the Difference, whether both Children were begotten at once; or ſucceſſively one after the other.

Superfætation, according to *Hippocrates*, in his Book which treats of it, is a reiterated Conception, when a Woman being already with Child, conceives again the ſecond time. That which makes many believe there can be no *Superfætation*, is, becauſe as ſoon as a Woman hath conceived, her Womb cloſeth, and is exactly firm, ſo that the Seed of a Man, abſolutely neceſſary to Conception, finding no Place nor Entry, cannot (as they ſay) be received, nor contained in it, to cauſe this ſecond Conception. To this may be added, that a pregnant Woman diſchargeth her Seed (which is as neceſſary for it as a Man's) by a Veſſel which terminates on the ſide of the exterior Part of the inward Orifice; which Seed by this means is ſhed into the *Vagina*, and not into the Bottom of the Womb, as it ſhould for this purpoſe. However, it may be anſwered to theſe Objections, which are very ſtrong, that though the Womb be uſually exactly ſhut and cloſe when a Woman hath conceived, and, that ſhe then ſheds her Seed by another Conveyance: Yet this general Rule may have ſome Exceptions, and the Womb, ſo cloſed, is ſometimes opened to let paſs

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ſome ſerous ſlimy Excrements, which by their ſtay offend it; or principally, when a Woman is animated with an earneſt Deſire of Copulation, in the Heat of which Action ſhe ſometimes diſchargeth by the Paſſage that terminates in the Bottom of the Womb, which being dilated and opened by the impetuous Endeavours of the Seed, agitated and over-heated more than ordinary, and this Orifice being at the ſame time a little opened, if the Man's Seed be darted into it at the ſame moment, it is thought a Woman may then again conceive, which is called *Superfætation*. This is confirm'd by a Hiſtory of a Servant, related by *Pliny*, who having the ſame Day copulated with two ſeveral Perſons, brought forth two Children, the one reſembled her Maſter, the other his Proctor. And alſo of another Woman, who likewiſe had two Children, the one like her Husband, and the other like her Gallant. But this different Reſemblance doth not altogether prove *Superfætation*, becauſe ſometimes different Imaginations may cauſe the ſame Effect.

This ſecond Conception is effectively as rare, as we find the Deciſion of it uncertain; nor muſt we imagine that always, when a Woman bringeth forth two Children or more at once, is *Superfætation*; becauſe they are almoſt always begot in the ſame Act, by the Abundance of both Seeds received into the Womb. Nor, that it may be at all times of a Woman's being with Child; for when it happens, it cannot be either the firſt or ſecond Day of Conception; becauſe, if the laſt Seed be received into the Womb, it would make a Mixture and Confuſion with the firſt, which is not yet involved with the little Pellicle, that might otherwiſe ſeparate it; nor is it formed perfectly till the ſixth or ſeventh Day, as *Hippocrates* ſaw in a Woman, who about that time expelled this Geniture: Beſides, the Matrix again opening it ſelf, could not hinder the firſt Seed from ſlipping out, being not as yet wrapt up in this little Membrane, to preſerve it. This makes me

not

not believe the Hiſtory of the Woman *Pliny* mentions, for the Reaſons alledged by him, to wit, that ſhe uſed Copulation the ſame Day with two ſeveral Perſons: For the laſt would certainly have cauſed this Confuſion of Seed, as I have ſaid, and ſo deſtroy'd the Work begun; but I rather believe, that this *Superfætation* may happen from the ſixth Day of Conception, or thereabouts, till the 30*th* or 40*th* at the moſt; becauſe then the Seeds are covered with Membranes, and that which is contained in the Womb is not yet of a conſiderable bigneſs: But after this time, it is impoſſible, or at leaſt very difficult, becauſe the Womb being extended more and more by the Growth of the Child, can hardly receive new Seed, and as hardly retain it, or hinder it from being caſt forth, by reaſon of its Fulneſs, having received it in that Eſtate.

When a Woman brings forth one or more Children at a Birth, begotten at once, which uſually are called Twins, and differ from *Superfætation*, 'tis known by their being both almoſt of an equal Thickneſs and Bigneſs, and having but one only and common Afterbirth, not ſeparated the one from the other, but by their Membranes, which wrapt each apart with their Waters, and not both in the ſame Membrane and Waters, as ſome have believed, contrary to the Truth: But if there are ſeveral Children, and a *Superfætation*, they will be alſo ſeparated by their Membranes, and not have a common Burthen, but each his Part; neither will they be of an equal Bigneſs, for that which is the *Superfætation* will always be leſſer and weaker than that engendred at firſt; who, becauſe of its Force and Vigour, draws the greateſt and beſt part of the Nouriſhment. Juſt as we find fair and great Fruit, have often near them very little ones; becauſe thoſe that are firſt knotted and faſtned to the Tree, take away all the Nouriſhment from their Neighbours, who did but bloſſom when the firſt had already acquir'd ſome Bigneſs. Sometimes Twins are not of an equal Bigneſs,

which

which happens according as the one or the other hath more strength to draw to it in greater abundance the best part of the common Nourishment.

Six Years since I layed a Woman at her full time, whom I delivered of a very great living Girl by the Feet, which first came to the Birth; and fetching the After-birth, I brought with it another Child, a dead Boy, as little again as the first Girl; and seemed not to be, respecting his Bigness, above five or six Months: Altho' they were both begotten at one and the same Act of Copulation, as was manifest by their both having but one and the same Burthen, which is the true Sign of it, as I have already said; and this second Child was so little that it came together with the Burthen, and wrapt up in the Membranes; which I presently opened, to see whether it was alive; but it had been a long time dead, as appeared by its Corruption.

I am not willing to say that there never is any *Superfætation*, but I say, that it happens very rarely; * for of an hundred Women that have Twins, ninety of them have but one Burthen common to both; which is a very certain Sign they had no *Superfætation*, and much more certain than the Indications taken from the Greatness or Strength of the Child, which is but conjectural.

* *My Author is out in his Computation, for there are near as many with two Burthens as with one.*

CHAP. IX.

Of a Mole, and its Signs.

OF all the several sorts of Great-Bellies, in Women, there remains that yet to be examined, caused by a *Mole*, of which we must always endeavour the Expulsion

pulsion as soon as we come to know it, being altogether contrary to Nature. The *Mole* is nothing but a fleshy Substance, without Bones, Joints, or Distinction of Members; without Form, or Figure, regulated and determined; engendred against Nature in the Womb, after Copulation, out of the corrupted Seed of both Man and Woman. Notwithstanding there are sometimes that have some Rudiments of a rough Form.

It is very certain, Women never engendred *Moles* without Copulation, both Seeds being required to it, as well as for a true Generation. There are some, truly, who never having had to do with a Man, do naturally cast forth, after a flooding, some strange Bodies, which in Appearance seem to be Flesh; but if special Notice be taken, they will find it but Clods of Blood coagulated, without Consistence or fleshly Texture, or membranous, as are the Moles and false Conceptions.

Moles are ordinarily engendred, when either the Man or Woman's Seed, or both together, are weak or corrupted, the Womb not labouring for a true Conception, but by the help of the Spirits with which the Seed ought to be repleniſhed: But so much the easier, as the small Quantity found in it is extinguished, and as it were choaked, or drowned by abundance of the gross and corruptted menstruous Blood, which sometimes flows thither soon after Conception, and gives not leisure to Nature to perfect what she hath with great Pains begun, and so troubling its Work, bringing thither Confusion and Disorder, there is made of the Seeds and Blood a meer *Chaos*, call'd a *Mole*, not usually ingendred but in the Womb of a Woman, and never or very rarely found in that of other Animals, because they have no menstruous Blood, as she hath.

A *Mole* hath no Burthen, nor Navel-string fastned to it, as a Child always hath; forasmuch as the *Mole*

it

it ſelf adheres to the Womb, by which means it receives Nouriſhment from its Veſſels: It is likewiſe clothed uſually with a kind of Membrane, in which is found a piece of Fleſh confuſedly interlaced with many Veſſels; it is of a Bigneſs and Conſiſtence, more or leſs, according to the Abundance of Blood it receives, its Diſpoſition, and alſo the Temperature of the Womb, and time it ſtays there; for the longer it ſtays, the harder it grows, and becomes ſchirrous, and difficult to be expell'd. For the moſt part there is but one, yet ſometimes more; of which, ſome cleave very ſtrongly, others very ſlightly to the Womb. When Women miſcarry of them before the ſecond Month, they are called falſe Conceptions: When they keep them longer, and this ſtrange Body begins to grow bigger, they are called *Moles*. Falſe Conceptions are more membranous, and ſometimes full of corrupted Seed; but *Moles* are altogether fleſhy. One may find in a Woman that hath a *Mole*, almoſt all the Signs of Conception, and of a Woman with Child; but there are likewiſe ſome other which differ, becauſe her Belly is harder and ſorer than when ſhe is with Child. The *Mole* being contrary to Nature, is very troubleſome to a Woman: And as it hath no true Life, nor animal Motion, ſo it is very painful to go with: For the *Mole* falls on whatſoever ſide ſhe turns, when ſhe is a little big, juſt like a heavy Bowl: She hath a great Wearineſs in her Legs and Thighs, and Suppreſſion of Urine from time to time, and finds a great Heavineſs in the Bottom of her Belly, foraſmuch as this Maſs of Fleſh by its Weight weighs down the Womb, which compreſſeth the Bladder of Urine; her Breaſts are not ſo ſwell'd, neither have they any, or very little Milk. It may be yet eaſier known, if with all theſe Signs ſhe finds no Motion after the fourth or fifth Month of her Great Belly; and certainly, if after her Reckoning is out, all the aforeſaid Signs remain and continue in the ſame manner.

These *Moles* are nourished in the Womb, to which they almost always adhere, and are sustained by the Blood with which it is always furnished, just as Plants are by the moisture of the Earth. Sometimes there is a Child together with a *Mole*, from which it is sometimes divided, and sometimes cleaving to its Body; which puts it in great Danger of its being mis-shapen or monstrous, because of the Compression which this strange Body causeth to the Infant, yet very tender. In the Year 1665, being at Mr. *Bourdelot*'s, Doctor in Physick of the Faculty of *Paris*, where was every Monday held Accademical Conferences: As they fell upon the Discourse of the *Circulation of the Blood*, which I explained according to my Opinion; they brought an Infant of a Woman newly brought to Bed at her full time, which wanted all the upper Part of the Head, having no Skull, no Brain, no nor an hairy Scalp; but had only, in lieu of all those Parts, a *Mole*, or fleshy Mass flat and red, of the Thickness and Bigness of an after-Burthen, covered with a simple Membrane strong enough: This Infant had however all the other Parts of the Body fat, and well composed and shap'd. This monstrous Disposition was the Cause of its Death assoon as born, and yet was very wonderful and astonishing to consider, how it could live so without Brain; as also very difficult to understand, how this fleshy Mass could serve instead of it, whilst it was in the Mother's Belly. It was interwoven with many Vessels, like a kind of * *Placenta*, yet of a more firm Substance. Mr. *Clerk* and Mr. *Juilet*, my Brethren and good Friends, were then present, and saw this Prodigy as well as my self.

* *The fleshy Part of the Burthen.*

A Woman having a *Mole*, hath a much worse Colour, and is every way more inconvenienced than a Woman with Child; and if she keeps it long, she lives all the while in danger of her Life. Some have them

two

two or three Years, and sometimes all the rest of their Lives; As hapned to a Peuterer's Wife, of whom *Amb. Paré* makes mention in his Book of Generation, who had one seventeen Years, and at last died of it. We will declare the Remedies convenient for it in another Place, where we speak of its Extraction.

CAAP. X.

After what manner a Woman ought to govern her self during her being with Child, when not accompanied with other considerable Accidents, and how to prevent them.

A Woman with Child, in respect of her present Disposition, altho' in good Health, yet ought to be reputed as tho' she were sick, during that neuter Estate (for to be with Child, is also vulgarly called a Sickness of nine Months) because she is then in daily Expectation of many Inconveniences, which Pregnancy usually causes to those that are not well governed.

She should in this Case resemble a good Pilot, who being imbarqued on a rough Sea, and full of Rocks, shuns the Danger, if he steers with Prudence; if not, 'tis by chance, if he escapes Shipwrack: So a Woman with Child is often in danger of her Life, if she doth not her best endeavour to shun and prevent many Accidents to which she is then subject: All which time care must be taken of two, to wit, her self, and the Child she goes with: For from one single Fault results double Mischief, inasmuch as the Mother cannot be any ways inconvenienced, but the Child partakes with her.

Now to the end she may maintain her self in good Health, as much as can be in that Condition, which always keeps a middle State, let her observe a good Diet suitable to her Temperament, Custom, Condition

tion and Quality, which the right Use of all the six Non-Naturals doth effect.

The Air, where she ordinarily dwells, ought to be well temper'd in all its Qualities: If not so naturally, it must be corrected as much as may be by different means. She must avoid that which is too hot, because it often causeth, by dissipating too much the Humours and Spirits, many Weaknesses to Women with Child; and particularly also that which is too cold and foggy; for, causing great Rhumes, and Distillations upon the Lungs, it exciteth a Cough, which by its sudden and impetuous Motions, forcing downwards, may make her miscarry. She ought not to dwell in very dirty narrow Lanes, nor near common Dunghils. For some Women are so nice, that the stink of a Candle not well extinguish'd, is enough to bring them before their time, as *Lieban* assures us he himself had seen: Which likewise may be caused, if not sooner, by the Smell of Charcoal, as happened once to a Laundress I knew, that miscarried the fourth Month; being in extream haste to finish some Linnen on a Saturday Night, she had not Patience to kindle the Charcoal in the Chimney, but in the Room in a Chafindish, which flew up into her Head, and made her miscarry the same Night, and in danger of dying. Let a Woman therefore endeavour, as much as her Convenience will permit, to live in an Air free from these Inconveniencies.

The greatest part of Women with Child have so great Loathings, and so many different Longings, and strong Passions for strange things, that it is very difficult to prescribe an exact Diet for them: But I shall advise them in this Case to follow the Opinion of *Hippocrates*, in Book 2. Aphor. 38. where he saith, *Paulo deterior & potus & cibus, suavior tamen, melioribus quidem, sed insuavioribus, præferendus.* Meat and Drink, tho' not so wholesome, if more acceptable, is to be preferred before that which is wholesome, and not

so pleasant: Which in my Opinion is the Rule they ought to observe, provided what they long for, is commonly used for Diet, and not strange and extraordinary Things; and that they have a Care of Excess. If the Woman be not troubled with these Loathings, let her then use such Diet as breeds good Juice, and in Quantity sufficient for her and the Child, which her Appetite may regulate. She must not then fast, nor be abstemious, because overheating her Blood thereby, renders it unfit to nourish the Child, which ought to be sweet and mild, and makes it tender and weak, or constrains it to come before its time, to search what is fit for it elsewhere: She must not eat too much at a time, and chiefly at Night, because the Womb by its Extent possessing a great Part of the Belly, hinders the Stomach from containing much, and causeth thereby a Difficulty of Breathing, because it compresseth the *Diaphragma*, which as then hath not an intire Liberty to be moved. Wherefore let her rather eat a little and often; let her Bread be pure Wheat, well baked and white, as is that at *Goneſſe*, at *Paris*, or the like; and not course Houshold Bread or Bisket, which swells up the Stomach, nor any other of the like Nature that's very stuffing. Let her eat good nourishing Meat, as are the tendereſt Parts of Beef and Mutton, Veal, Fowl; or fat Pullets, Capons, Pidgeons and Partridge, either roast or boiled, as she likes best; new layed Eggs are also good: And because big-bellied Women have never good Blood, let her put into her Broths those Herbs which purifie it, as Sorrel, Lettice, Succory and Borrage; she must avoid hot seasoned Pies and baked Meats, and especially Crust, being hard of Digestion, extremely overchargeth the Stomach: If she hath a mind to Fish, let it be new, and not salted, Fish of Rivers and running Streams; forasmuch as Pond-Fish tasts of Mud, and breeds ill Juice. But when Women cannot absolutely refrain their extravagant Longings, it is

better

better (as we have already said) to suffer them to deviate a little from this Rule of Diet (provided it be moderate) than too much to oppose their Appetites. They may drink at their Meals a little good old Wine, well temper'd with Water, rather Claret than White; which will help make a good Digestion, and comfort the Stomach, always weak during Pregnancy; and if they were not used to drink it before, let them accustom themselves to it by Degrees; and as well in drinking as eating, they must shun all Things hot and * diuretick, because they provoke the Courses, which is very prejudicial to the Child.

* *Medicines which cause pissing.*

By moderate Sleep all the natural Functions of a Woman are fortified, and particularly the Concoction of Food in the Stomach, then very subject to Loathings and Vomitings. We say, moderate; because, as excessive Watchings dissipate the Spirits, so too much Sleep choak them. Let therefore Women with Child sleep nine or ten Hours at least in four and twenty, and twelve at most; and rather in the night-time, as fittest for Rest, than the Day, as Persons of Quality are accustomed, who frequenting the Court, ordinarily turn Night into Day. However they who have gotten this ill Habit, had better continue it than change too suddenly, because this Custom is become natural to them.

For what respects Exercise and Rest, let them govern themselves according to the different Time of their being with Child; for at the Beginning of the Conception (if the Woman perceive it) she ought (if she can) to keep her Bed, at least till the fifth or sixth Day, and by no means to use Copulation all the time; forasmuch as the Seeds being not yet covered with the Membrane formed in that time (as we have said already) are in the Beginning, by the Agitation of the Body, very apt in some Persons to slip forth.

She ought neither to go in Coach, Chariot or Waggon, nor on Horſeback, whilſt with Child; and much leſs the nearer ſhe comes to her time: Becauſe this kind of Exerciſe doubles the Weight of what is contained in the Womb, by the Jolts ſhe receives, and often makes her miſcarry: But ſhe may walk gently, go in a Sedan or Litter; ſhe ought neither to carry or lift heavy Burdens, nor lift up her Arms too high: And therefore ſhe ought not to dreſs her own Head, as ſhe uſed to do, becauſe it cannot be done without ſtretching her Arms too much above her Head, which hath cauſed many to miſcarry before their time; becauſe the Ligaments of the Womb are at an inſtant looſened by theſe violent Extenſions. Let her Exerciſe be gentle walking, and the Heels of her Shoes low; becauſe Women cannot, for the Bigneſs of their Bellies, ſee their Feet, and ſo are ſubject to ſtumble and fall: In ſhort, ſhe muſt govern her ſelf in theſe Exerciſes, rather to err in too much Reſt, than in too much Exerciſe; for the Danger is greater by immoderate Motion, than in too much Reſt. It is impoſſible for me in this Point to be of the Opinion of all other Authors, tho' the whole World follows them in this their evil and dangerous Counſel, who would have a pregnant Woman exerciſe her ſelf more than ordinary toward the latter end of her Reckoning, that ſo, *as they ſay*, the Child may ſink lower: But if they conſider the Point well, they would without doubt find it to be the Cauſe of more than half of the hard Labours; and that on the contrary, Reſt would be more advantagious to them, as I ſhall prove by the following Explication.

Firſt, We muſt know and take for granted, that the Birth of a Child ought to be left to the Work of Nature well regulated, and not provoke it, by ſhaking with Exerciſe, to diſlodge it before its full time: Which hapning (tho' it be but ſeven or eight Days ſooner) proves ſometimes as prejudicial to the Infant, as we

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ſee it is ſometimes to Grapes, which we find four or five Days before they are full ripe, to be yet almoſt half Verjuice. But to explain more clearly than by this Compariſon, that theſe kind of Exerciſes often cauſe hard Labours (as we have already ſaid;) conſider that the Infant is naturally ſituated in the Womb with the Head uppermoſt, and the Feet downwards, with its Face towards the Mother's Belly, juſt till it hath attained to the eighth Month; at which time, and ſometimes ſooner, and ſometimes alſo later, his Head being very great and heavy, he turns over, his Head downwards, and his Heels upwards, which is the ſole and true Situation in which he ought to come into the World, all other Poſtures being contrary to Nature. Now juſt when the Child is about to turn, according to Cuſtom, into his intended Poſture, inſtead of giving her ſelf Reſt, ſhe falls a jumping, walking, running up and down Stairs, and exerciſing her ſelf more than ordinary, which very often cauſes it to turn croſs, and not right as it ought to be; and ſometimes the Womb is depreſſed ſo low, and engaged in ſuch ſort towards the laſt Month, in the Cavity of the *Hypogaſter*, by theſe Joltings, that there is no Liberty left the Infant to turn it ſelf naturally; wherefore it is conſtrained to come in its firſt Poſture, to wit, by the Feet, or ſome other worſe. Moreover, it would be very convenient, that the Woman to this end ſhould abſtain from Coition, during the two laſt Months of her Reckoning, foraſmuch as the Body is thereby much moved, and the Belly compreſſed in the Action, which likewiſe cauſeth the Child to take a wrong Poſture. I believe that they that will ſeriouſly reflect on theſe things, will make no Difficulty to quit this old Error, which hath certainly cauſed the Death of many Women and Children, and much Pain to divers others, for the Reaſons above-mentioned.

Some have miscarried only with the Noise of a Cannon; as also with the Sound of a great Bell; but especially a Clap of Thunder, when of a sudden it surprises and frights them.

Big-bellied Women are sometimes subject to be costive, because the Womb by its Weight pressing the *Rectum*, hinders the Belly from discharging its Excrements with Ease. They that are troubled with this Inconveniency, may use Damask-Prunes stewed, Veal-Broth, and Herb-Pottage, with which they may gently moisten and loosen the Belly. If these Things are not sufficient, they may give her gentle * Clysters of Mallows, Marshmallows, Pellitory, and Aniseeds, with two Ounces of brown Sugar dissolved in it, adding a little Oil of Violets; or else a Decoction made with a Handful of Bran, two Ounces of Honey of Violets, and a Piece of fresh Butter, or any other, as Occasion might require: But there must be great Care taken, that no sharp Clyster be given her to this purpose, nor other Drugs to cause a Looseness, or too great an Evacution, lest it endanger her to miscarry: As *Hippocrates* very well warns us in the 34*th* Aphorism of his fifth Book, where he says, *Mulieri in utero gerenti si alvus plurimum profluat, periculum est ne abortiat.* If a big-belly'd Woman have a violent Looseness, she will be in danger of miscarrying.

* *Clysters better forborn without urgent Necessity, and add Senna to the Prunes, or give some other Lenitive.*

If she ought to govern her self well in the Observation of what we have lately mention'd, she ought no less to be careful to overcome and moderate her Passions, as not to be excessive angry; and above all, that she be not affrighted; nor that any melancholy News be suddenly told her; for these Passions, when violent, are capable to make a Woman miscarry at the Moment, even at any time of her going with Child; as it happen'd to my Cousin's Mother, Mrs. *Dionis*, a Merchant, dwelling in the Street *Quinquampois*, whose Fa-

Father being ſuddenly kill'd with a Sword by one of his Servants, who meeting him in the Street, traiterouſly run him thorough out of Spite and Rage, becauſe he had ſome few Days before turn'd him out of Doors: They brought immediately this ill News to his Wife, then eight Months gone, and preſently after brought her dead Husband; at which ſudden Fright ſhe was immediately ſurpriz'd with a great Trembling, ſo that ſhe was preſently delivered of the ſaid *Dionis*, who is to this Day (which is very remarkable) troubled with a ſhaking in both Hands, as his Mother had when ſhe was delivered of him, having yet no other Inconvenience, notwithſtanding he was born in the Eighth Month, by ſuch an extraordinary Accident; nor doth he ſeem to be above forty Years old, tho' near fifty. When he ſigned his Contract of Marriage, they who knew not the reaſon of it, when they ſaw his Hands ſhake, thought it was through Fear of his ill Bargain, of which they were diſabus'd, when they had heard the Cataſtrophe that haſten'd his Birth. Wherefore if there be any News to tell a big-bellied Woman, let it rather be ſuch as may moderately rejoice her, (for exceſſive Joy may likewiſe prejudice her in this Condition) and if there be abſolute Neceſſity to acquaint her with bad News, let the gentleſt means be contriv'd to do it by Degrees, and not all at once.

Aſſoon as a Woman finds her ſelf with Child, or miſtruſts it, let her not lace her ſelf ſo cloſe as ſhe ordinarily doth, with Bodice ſtiffned with Whalebone, to make her Body ſhapely, which very often injures her Breaſts, and ſo encloſing her Belly in ſo ſtrait a Mould, ſhe hinders the Infant from taking its free Growth, and very often makes it come before its time, and miſ-ſhapen. Thoſe Women are ſo fooliſh as not to mind, that making themſelves ſlender when they are with Child, quite ſpoils their Belly, which therefore after Child-bed remains wrinkled, and pendent as a

Bag, and then they cry, It is the Midwife or Nurse that did them that Mischief, in not swathing, and looking to them as they ought to do; not considering that it came by their strait lacing whilst they were big upwards, which causes the Belly, finding no place, to be equally extended on all sides, to dilate it self only downwards, whether all the Burden is in that manner thrust: To avoid which, let them use Habits more large and easie; and wear no Busks, with which they press their Bellies to bring them into Shape. Let them also forbear Bathing in any manner, after they know they have conceiv'd, lest the Womb be excited to open before the time. Almost all big-belly'd Women are so infatuated with the Custom to bleed when they are half gone, and in the seventh Month, that if they should neglect it, (although they were otherwise well) they would never believe they could be safe delivered. I will not in the mean time justifie and make them believe by that, what *Hippocrates* saith in his 31st Aphorism of his 5th Book, *Mulier in utero ferens, secta vena abortit, eoque magis si sit fœtus grandior.* If (saith he) a Woman be blooded, she miscarries; and the rather if she be far gone. This Aphorism must not prohibit us the Use of Bleeding when the Case requires, but only warns us to use it with great Prudence; forasmuch as some Women want Bleeding three or four times, yea and oftner, whilst they are with Child, when twice may be sufficient to others: For as there have been some that have been blooded nine or ten times for Diseases during their Pregnancy, and yet go on with their Infant to their full Account; so others have miscarry'd by Bleeding but once a little too copiously, as in this Aphorism speaks *Hippocrates*. Now since all are not of the same Nature, they must not all be governed after the same manner, nor believe that it is necessary to bleed all big-belly'd Women; one may judge of the Necessity according as they are more or less sanguine. It is the same in Purging, which ought

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to be prudently adminiſtred as well as Bleeding, according to the Exigency of the Caſe, uſing always gentle and benign Remedies when they are neceſſary; as *Caſſia*, *Rhubarb*, *Manna*, with the Weight of a Dram or two at moſt of good *Senna*. Theſe Purgatives may ſerve turn for a Woman with Child, ſhe ought not to uſe others more violent: If ſhe obſerves all that we have afore-mentioned, ſhe may then hope for a good Iſſue of her great Belly.

Having amply enough declared, how a Woman with Child ſhould be governed when accompanied with no ill accident, and given the Rules ſhe ought to keep to prevent them, We will now examine ſeveral Indiſpoſitions to which ſhe is ſubject, particularly during her Pregnancy.

CHAP. XI.

The Means to prevent the many Accidents which happen to a Woman during the whole time of her being with Child; and firſt of Vomitings.

VOmiting, with the Suppreſſion of the Terms, is, for the moſt part, the firſt Accident which happens to Women, and the Means by which they themſelves perceive their Pregnancy. It is not always cauſed, as believed, from ill Humours collected in the Stomach, becauſe of this Stoppage of their Courſes: Which corrupted Humours do often cauſe a depraved Appetite in pregnant Women, when either they flow thither, or are there engendred; but not this Vomiting which happens immediately after Conception; not but that in proceſs of time it may be continued by thoſe which are there afterwards corrupted; but theſe firſt Vomitings proceed from the Sympathy between

tween the Stomach and the Womb, because of the Similitude of their Substance, and by means of the Nerves inserted in the upper Orifice of the Stomach, which have Communication by Continuity with those that pass to the Womb, being Portions of the sixth Pair of those of the Brain. Now the Womb, which hath a very exquisite Sense, because of its membranous Composition, beginning to wax bigger, feels some Pain, which being at the same time communicated by this Continuity of Nerves to the upper Orifice of the Stomach, causes there these Nauseatings and Vomitings, which ordinarily happen. And to prove that it is thus in the Beginning, and not by pretended ill Humours, appears, in that many Women vomit from the first Day of their being with Child, who were in perfect Health before they conceived, * at which Time the Suppression of the Terms could not cause this Accident: Which proceedeth from this Sympathy in the very same manner, as we see those that are wounded in the Head and Bowels, and that have the Stone Cholick, are troubled with Loathings and Vomitings, and yet have no corrupt Humours in the Stomach. Loathings and Vomitings, which are Motions of the Stomach contrary to Nature, happen to big-belly'd Women from the beginning, for the Reasons above-recited.

* *And yet may have ill Humours in the Stomach, which by the Strength of the retentive Faculty, may be kept quiet, till by Wound or Conception they come to be moved.*

Loathing or Nauseousness is nothing but a vain Desire to vomit, and a Motion by which the Stomach is raised towards the upper Orifice, without casting up any thing. And Vomiting is another more violent Endeavour, by which it casts forth of the Mouth what Humour soever is contained in its Capacity. In the beginning Vomiting is but a single Symptom not to be feared; but continuing a long time, it weakens the Stomach very much, and hindering Digestion, corrupts the Food, instead of concocting it, whence afterwards

terwards are engendred those ill Humours which need purging. These Vomitings ordinarily continue to the third or fourth Month of being with Child, which is the time the Child appears manifestly to quicken in, after which it begins to cease, and Women to recover the Appetite they had lost during their being young with Child; because the Infant growing stronger and bigger, having need of more Nourishment, consumes abundance of Humours, which hinders the flowing of so much Superfluity to the Stomach; besides, at that time the Womb is by degrees accustomed to Extension: It continues in some till they are delivered, which often puts them in Danger of miscarrying, and the rather, the nearer the Woman is to her full time. Others again are more sometimes tormented with it towards the End of their Reckoning than at the Beginning, because the Stomach cannot then be sufficiently widened to contain easily the Food, being compressed by the large Extension and Bigness of the Womb. Such a Vomiting which comes about the latter End of the Reckoning to Women whose Children lie high, seldom ceaseth before they are brought to bed.

You need not wonder, or be much troubled at the Vomitings in the beginning, provided they are gentle, and without great straining, because they are on the contrary very beneficial to Women; but if they continue longer than the third or fourth Month, they ought to be remedy'd, because the Aliment being daily vomited up, the Mother and the Child having need of much Blood for their Nourishment, will thereby grow extremely weak, besides the continual Subversion of the Stomach, causing great Agitation and Compression of the Mother's Belly, will force the Child before its time, as is already mentioned.

To hinder this Vomiting from afflicting the Woman much, or long (it being very difficult to hinder it quite) let her use good Food, such as is specify'd before in the Rules of Dyet; but little at a time, that

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the Stomach may contain it without Pain, and not be constrained to vomit it up, as it must when they take too much, because the big Belly hinders the free Extension of it; and for to comfort and strengthen it (being always weak) let her season her Meat with the Juice of Oranges, Lemons, Pomegranates, or a little Verjuice or Rose-Vinegar, according to her Appetite. She may take likewise a Decoction made of *French* Barley-Flower, or good Wheat-Flower, having dried the Flower a little before in an Oven, mixing the Yolk of an Egg with it, which is very nourishing, and of easie Digestion: She may likewise eat after her Meals a little Marmalade of Quinces, or the Jelly of Gooseberries; let her Drink be good old Wine, rather Claret than White, being well mix'd with good running Fountain-Water, and not that which hath been kept long in Cisterns, as is most of the Water of our Fountains of *Paris*, which acquire by that stay an evil Quality: If she cannot get such fresh Water, let her rather use River Water taken up in a Place free from Filth, in which she may sometimes quench hot Iron: Above all, let her forbear all fat Meats and Sawces, for they extremely moisten and soften the Membranes of the Stomach, which are already weak enough, and relaxed by the Vomitings, as also all sweet and sugared Sawces, which are not convenient for her, but rather such as are a little sharp, with which it is delighted and comforted.

But if notwithstanding these Precautions, and this regular Diet, the Vomiting (as it sometimes happens) continues still, altho' the Woman be above half gone, it is a clear sign there are corrupt Humours cleaving to the In-sides of the Stomach, which being impossible to be evacuated by so many preceding Vomitings, because they adhere so fast, must be purged away by Stool; to effect which they need a Dissolvent, which may be a gentle Purge, made by infusing half a Dram of Rhubarb, a Dram or two at most of good Senna, and an Ounce

Ounce of Syrop of Succory; which Purge diſſolves the Humours, and in evacuating them, comforts the Parts: Or, it may be made with young Mallows, *Caſſia*, Tamarinds, or any other gentle Purgers, according as the Caſe requires, always adding a little Rhubarb, or compound Syrup of Succory; obſerving likewiſe what Humours ought to be purged: For, as *Hippocrates* ſaith, in the 12*th* Aphoriſm of his firſt Section, *In perturbationibus ventris, & vomitibus ſponte evenientibus, ſi quidem qualia opportet purgari, purgentur, confert, & facile fetunt: ſin minus contra*, &c. In Perturbations and Dejections of the Belly, and in ſpontaneous Vomitings, if the Matter be purg'd away, which ought to be, the Patient finds Eaſe and Comfort: If not, the contrary. Therefore we are to conſider, that it is not enough to purge, unleſs we evacuate the peccant Humours! for otherwiſe purging more weakens the Stomach, which it would not if it were well ordered, and convenient to evacuate the vicious Humour. If once be not ſufficient, it may be repeated, giving the Woman ſome few Days Reſpit between both: If the Vomiting continues daily, almoſt without Intermiſſion, altho' the Woman obſerves a good Diet, and after ſhe hath been reaſonably well purged, we muſt reſt there, leſt ſomething worſe happen, for which we may incur blame; ſhe being then in great Danger of miſcarrying: And when the Hiccough takes them through Emptineſs, proceeding from too much Evacuation, cauſed by theſe continual Vomitings, it is very bad, as the third Aphoriſm of the ſecond Book teacheth us, *A Vomitu ſingultus malum.*

Some adviſe, after all theſe things have been try'd in vain, great Cupping-glaſſes ſhould be applied to the Region of the Stomach, to keep it firm in its Place: But I believe it to be a Chip in * Pottage, which doth neither Good nor Hurt; becauſe the

* *I hold them very beneficial, if apply'd with Judgment.*

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Stomach is looſe, and no ways adhering to this upper part of the Belly. But ſince theſe Vomitings cool it, and daily weaken it, I ſhould adviſe a big-belly'd Woman to wear in the Winter, upon its Region, a good piece of warm Serge, or ſoft Lamb-Skin, which would a little warm thoſe Parts, and help Digeſtion, which is always weak. The *Italians* have a Cuſtom, which is not bad; they wear to the ſame purpoſe a fair Piece of Stuff under their Doublets, upon the Region of their Stomach, of which they are ſo careful, that if they ſhould leave it off but two Days in the Winter, nay even in the Summer, they would think themſelves ſick; and they are ſo great Lovers, and ſo curious of it, that this Stomacher is often their greateſt Bravery, enriching it with Gold and Silver Embroidery, and Ribonds of very fine Colours.

We have diſcourſed enough about Vomiting, cauſed by Pregnancy; wherefore we will paſs forwards to ſome other Accidents.

CHAP. XII.

Of Pains of the Back, Reins, and Hips.

ALL theſe Accidents are but the Effects of the Dilatation of the Womb, and the Compreſſion it makes by its Greatneſs and Weight on the neighbouring Parts; which are much greater the firſt time the Woman is with Child than afterwards, when the Womb only receives the ſame Dimenſions it had already before: But when it hath not yet been dilated, it is more ſenſible of this Extenſion, and the Ligaments which hold it in its natural Situation, ſuffer a greater Streſs in the firſt Pregnancy, having never before been forced to lengthen to anſwer the Extent of the Womb, than

than in the following great Bellies, to which it obeys more easily the second time.

These Ligaments, as well round as large, cause these Pains, being much straitned and drawn by the Bigness and Weight of the Womb, which contains a Child, to wit, the large ones, those of the Back and Loyns, which answer to the Reins, because these two Ligaments are strongly fastned towards these parts; the round ones cause those of the Groins, Share and Thighs, where they terminate. They are sometimes so violently extended by the extreme Bigness and great Weight of the Womb, especially of the first Child (as I said before) that they are lacerated and torn, being not able to yield or stretch any further, and chiefly if the Woman in that Condition makes a false Step, which causeth in them almost insupportable Pains, and other worse Accidents; as it happened two Years since to a near Kinswoman of mine, who being six Months gone, or thereabouts, of her first Child, felt the like after she had stumbled, and perceived at the same Moment something crack in her Belly towards the Region of the Reins and Loyns, which was one of these large Ligaments, with a kind of Noise, by the sudden Jolt she received. At the same instant she felt extream Pains in her Reins and Loyns, and all the one side of her Belly, which made her immediately vomit very often with much Violence; and the next Day she was taken with a great continued Fever, which lasted seven or eight Days, without being able to sleep or rest one Hour; all which time she continued to vomit all she took, with a strong and frequent Hiccough, having also great Pains, which seemed as if they would hasten her Labour, which (for her sake) I was very apprehensive of, as also of her Death: But with the help of God, having put her immediately to Bed, where she continued twelve whole Days, in which time I bled her thrice in her Arm on several Days, and made her

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take at two several times a small Grain of *Laudanum* in the Yolk of an Egg, a little to ease her violent Pains, by giving her Rest, always ordering her from time to time good strengthning Cordials; all these Symptoms, which at first seemed desperate, ceased by little and little, and she went on her full time, when she was happily delivered of a Son, which lived 15 Months, notwithstanding all those mischievous Accidents she met with, which were enough to have kill'd half a dozen others: But God sometimes is pleased to work Miracles by Nature, aided with Remedies fit for the Purpose, as well as by his Grace.

This History informs us (I think) very well how these Pains of the Loyns, Back, and Reins come; and the pregnant Womb causeth also those of the Hips by its Greatness and Weight, in compressing them, and bearing too much upon them. There is nothing will ease all these sorts of Pains better, than to rest in Bed, and bleed in the Arm, if there were any great Extension or Rupture of any Ligament of the Womb, as was in the Case recited: And when the Womb bears and weighs too much upon the Hips, if the Woman cannot keep her Bed, she ought to support or comfort her Belly with a broad Swaith well fitted for the Purpose, and to bear it as patiently as she can to the time of her Labour, which will free her from all these Accidents.

CHAP. XIII.

Of the Pains of the Breasts.

AS soon as a Woman conceives, her Terms wanting the ordinary Evacuation, the Passages being stopt, and the Woman breeding daily Blood, there is a Necessity, she consuming but little whilst young with Child, the Fruit being yet very little also, that the

the Veſſels which are too full, ſhould diſgorge part, as it doth upon the Parts diſpoſed to receive it, ſuch as are the Kernels, and glandulous Parts, eſpecially the Breaſts, which imbibe and receive a great Quantity of it, which filling and extremely ſwelling them, cauſeth this Pain in them, which Women feel when they are with Child, and happens alſo to thoſe whoſe Terms are only ſuppreſſed.

In the Beginning we ought to leave the whole Work to Nature, and the Woman muſt only have a care ſhe receives no Blows upon thoſe Parts, which are then very tender, nor be ſtreight laced with her Bodice, or other ſtiff Waſtcoats, that might bruiſe and wound her; upon which follow Inflamations and *Abſceſs:* But after the third or fourth Month of going with Child, the Blood being ſtill ſent to the Breaſts in great Abundance, 'tis much better to evacuate it by bleeding in the Arm, than to turn or drive it back on ſome other part of the Body, by repercuſſive or aſtringent Medicines; becauſe it cannot flow to any part, where it can do leſs hurt than in theſe. Wherefore I ſhould rather prefer, the Woman being very plethorick, Evacuation, by bleeding in the Arm, than any other way, becauſe of ſhunning thereby the Accident, of which ſpeaks *Hippocrates* in his 40th Aphoriſm of the 5th Book, *Quibus Mulieribus in Mammas ſanguis colligitur, furorem ſignificat:* If the Blood be carried in too great Abundance to the Breaſts, it ſignifies that the Woman is in danger of being frantick, becauſe of the Tranſport which may be made thence to the Brain; which Accident is avoided by moderate bleeding in the Arm, as alſo by a regular cooling Diet, moderately nouriſhing, for to diminiſh the Quantity, and temper the heat of the Humours of the whole Habit.

CHAP. XIV.

Of Incontinence, and difficulty of Urine.

THE Situation of the Bladder, placed just upon the Womb, is sufficient to instruct us wherefore pregnant Women are sometimes troubled with Difficulty of Urine, and the reason why they cannot often hinder, nor scarce retain their Water: Which is caused two ways; 1. Because the Womb with Child, by its Bigness and Weight, compresseth the Bladder, so that it is hindred from having its ordinary Extension; and so incapable of containing a reasonable quantity of Urine; which is the Cause that the bigger the Woman grows, and the nearer her time she approaches, the oftner she is compelled to make Water, which for that reason they cannot keep. 2. If the weighty Burden of the Womb doth very much compress the Bottom of the Bladder, it forceth the Woman to make Water every Moment: But contrarily, if the Neck of it be pressed, it is filled so extremely with Urine, which stays there with great Pain, being not able to expel it, forasmuch as the Sphincter, because of this Compression, cannot be opened to let it out. Sometimes also the Urine, by its Acrimony, excites the Bladder very often, by pricking it, to discharge it self; and sometimes by its Heat it makes an Inflamation in the Neck of the Bladder, which causeth its Suppression. It may be likewise, that this Accident is caused by a Stone contained in the Bladder; then the Pains of it are almost insupportable, and much more dangerous to a Woman with Child, than to one that is not, because the Womb, by its swelling, causeth perpetually the Stone to press against the Bladder: And so much the violenter are these Pains, as the Stone is greater, or the Figure of it unequal and sharp.

It is of great Consequence to hinder these violent and fre-

frequent Endeavours of a big-bellied Woman to make Water, and to remedy it, if poſſible, both in one and the other Indiſpoſitions; becauſe by long Continuance of always forcing downwards to make Water, the Womb is looſened and bears very much down, and ſometimes is forced (the Inconvenience not ceaſing) to diſcharge it ſelf of its Burden before the ordinary time. This is that ſhould be endeavoured to be hindred, having reſpect to the different Cauſes of the Diſtemper; as when it comes from the Bigneſs and Weight of the Womb, preſſing the Bladder, as it is for the moſt part: The Woman may remedy it, and eaſe her ſelf, if when ſhe would make Water, ſhe lift up with both her Hands the Bottom of her Belly: She may wear a large Swaith accommodated to this uſe, which will bear it up if there be Occaſion, and hinder it from bearing too much upon the Bladder; or, to do better, ſhe may keep her Bed.

If it be the Acrimony of the Urine, that makes the Inflamation on the Neck of the Bladder, it may be appeaſed by a regular cooling Diet, drinking only *Ptiſan*, and forbearing the uſe of Wine, and all ſorts of Purgations, becauſe they ſend the Filth of the whole Body to the Part affected, and by their Heat, do yet more augment the Acrimony and Inflamation: But ſhe will do well to uſe, Mornings and Evenings, Emulſions made with the cold Seeds, or Whey mixt with Syrup of Violets. This Remedy is proper, by refreſhing gently, to cleanſe the Urinary Paſſages, without prejudicing either the Mother or Infant. If the Inflamation and Acrimony of the Urine be not removed by this Rule of Diet, they may let her blood a little in the Arm, to prevent any ill Accident that may happen: They may likewiſe bath her outward Entry of the Neck of her Bladder with a Decoction of emollient and cooling Herbs, as the Leaves of Mallows, Marſh-mallows, Pellitory, and Violets, with a little Linſeed, which being viſcous,

will help the Conduit of the Urine to dilate it ſelf the eaſier; there may be alſo Injections given into the Bladder of the ſame Decoction, to which may be added Honey of Violets, or elſe of luke-warm Milk.

But if the Woman, notwithſtanding ſhe obſerves theſe Directions, cannot make Water, Recourſe muſt be had to the laſt Remedy, which is to draw it forth by a Catheter, repreſented and marked with the Letter M in the Table of Inſtruments, at the end of the ſecond Book, which being anointed with Oil Olive, or ſweet Almonds, having firſt lifted up and thruſt the Belly a little upwards, muſt be gently introduced by the Urinary Paſſages into the very Hollow of the Bladder, and then the Urine will immediately paſs away; which being finiſhed, the Catheter muſt be taken forth, and if the Suppreſſion continues, it may be uſed again in the ſame manner until the Accident quite leave her, and then they may try whether ſhe can urine naturally. If ſhe be in very great Extremity, ſhe may uſe an * half-Bath luke-warm, provided ſhe be not too much moved by this Remedy, abſtaining alſo from all Diureticks, which are very prejudicial to big-bellied Women, becauſe they provoke Abortion. If on the other ſide, this Evil ariſes from the Stone, which preſenting it ſelf to the Neck of the Bladder, ſtops the Urinary Paſſage, whilſt with Child, ſhe muſt be contented to have it only thruſt back with a Catheter: But if it be ſmall, one may try to draw it forth with a ſmall Probe fit for the Purpoſe, putting the Fore-finger into the *Vagina*, to keep it in Subjection that it recoyl not back towards the Bladder, which is only to be done to the ſmall ones; for ſhe muſt be delivered before the great ones can be drawn forth, it being better to leave her in that Condition, than to endanger her Life or the Child's, by drawing it.

* *Not ſafe.*

CHAP.

CHAP. XV.

Of the Cough, and difficult Breathing.

WOmen whoſe Children lie low, are oftner troubled with Difficulty of Urine (as mentioned in the foregoing Chapter) than they whoſe Children lie higher, and are indeed exempted from this and the like Inconvenience, but then more ſubject to a Cough and Difficulty of Breathing than the former.

A Cough, if violent, as ſometimes even to Vomiting, is one of the moſt dangerous Accidents, which contributes to Abortion, becauſe it is an Eſſay by which the Lungs endeavour to caſt forth of the Breaſt that which offends them, by a Compreſſion of all its Muſcles, which preſſing all the incloſed Air inwards, with which the Lungs are much extended, thruſts alſo by the ſame means with a ſudden Violence the *Diaphragma* downwards, and conſequently all the Parts of the lower Belly, but particularly the Womb of the pregnant Woman, which Accident continuing long and violent, often cauſeth her to come before her time.

This Cough proceeds ſometimes from ſharp and biting Rheums, which diſtil from the Brain upon the ſharp Artery and the Lungs, and ſometimes from a Blood of the like nature, which flows from the whole Habit towards the Breaſt, upon the Suppreſſion of the Terms; as alſo from having breathed in too cold an Air, which irritates the Parts, and excites them to move in that manner; but being begun by theſe Cauſes, it is very often augmented by the Compreſſion the Womb of the pregnant Woman makes upon the *Diaphragma*, which cannot have its free Liberty in thoſe that bear their Children high, becauſe by its

great Extenſion it bears up almoſt all the parts of the lower Belly towards the Breaſt, and principally the Stomach and Liver, forcing them againſt the *Diaphragma*, which is thereby compreſſed, as we have ſaid.

This may be remedied by the Woman's obſerving a good Diet ſomething cooling: If ſharp Humours cauſe it, avoiding all Meats ſalted, ſpiced, or *hautgouſt*; ſhe muſt forbear ſharp Things, as Oranges, Citrons, Pomegranates, Vinegar, and others of the like Nature, becauſe they yet more and more by their pricking Quality excite the Cough: But ſhe may make uſe of Lenitives, and ſuch as ſweeten the Paſſages, as Juice of Liquoriſh, Sugarcandy, and Syrup of Violets, or Mulberries, of which they may mix ſome Spoonfuls with a *Ptiſan* made with Jujubes, Sebeſtens, Raiſons of the Sun, and *French*-Barley, always adding a little Liquoriſh to it: It may not likewiſe be amiſs to turn the Abundance of theſe Humours, and draw them downwards by ſome gentle Clyſter. If this Regimen prevails nothing, and that there appears Signs of Fulneſs of Blood, it will be neceſſary, at whatſoever time it be of her going with Child, to bleed her in the Arm, and tho' this Remedy be not uſually practiſed when they are young with Child, yet in this caſe it muſt: For a continual Cough is much more dangerous than moderate Bleeding. If the Cough comes of Cold, let her be kept in a cloſe Chamber with a Napkin three or four times double about her Neck, or a Lambskin, that it may keep her warm; and going to Bed, let her take three or four ſpoonfuls of Syrup of burnt Wine, which is very pectoral, and cauſeth a good Digeſtion, if it be made in the following manner.

Take half a Pint of good Wine, two Drams of good Cinamon bruiſed, half a dozen Cloves, with four Ounces of Sugar; put them together in a Silver Poringer, and cauſe them to boil upon a Chafindiſh of Coals, burn it, and afterwards boil it to the Conſiſtence of a Syrup, which let the Woman take at Night,

Night, an Hour or two after a light Supper. It must always be observed from whatsoever Cause the Cough proceeds, that the Woman go loose in her Clothes, for being strait-laced, the Womb is the more thrust down, by the Endeavours the Cough causeth it to make. And because Sleep is very proper to stay Defluxions, it may be procured (if there be Occasion) by some small Julip, using by no means the strong Stupefactives, which are dangerous to a Woman with Child, if there be not a very great Necessity; as there was in my Kinswoman, who had furious Accidents by the Hurt she got from the Stumble, of which I gave you an Account in the 12th Chapter of this Book.

There are Women that carry their Children so high, (especially their first, because the large Ligaments, which support the Womb are not yet relaxed) that they think them to be in their Breast, which causeth so great an Oppression and Difficulty of Breathing, that they fear they shall be choaked assoon as they have either eaten a little, walk'd, or gone up a Pair of Stairs; which comes (as I said before) by reason the Womb is much enlarged, and greatly presseth the Stomach and Liver, which forces the *Diaphragma* upwards, leaving it no free Liberty to be moved, whence is caused this Difficulty of breathing. Sometimes also their Lungs are so full of Blood, driven thither from all Parts of the Body when with Child, that it hardly leaves Passage for the Air: If so, they will breath more easily assoon as a little Blood is taken from the Arm, because by that means the Lungs are emptied, and have more Liberty to be moved: But if this Difficulty of Breathing comes from a Compression made by the Womb against the *Diaphragma*, in forcing the Parts of the lower Belly against it; the best Remedy is to wear their Clothes loose about them, and rather eat little and often, than fill their Bellies too much at once; because it is thereby more pressed against the *Diaphragma*, and so augments the Accident. Neither must she use any vis-

cous or windy Meats, as Peaſe, *&c.* but only ſuch as are of an eaſie Digeſtion; ſhe muſt all the while avoid Occaſion of Grief and Fear, becauſe theſe two Paſſions drive the Blood to the Heart and Lungs in too great abundance, ſo that the Woman, who can hardly already breathe, and hath her Breaſt ſtuft, will be in Danger of being ſuffocated; for the abundance of Blood filling at once and above meaſure the Ventricles of the Heart, hinders it Motion, without which one cannot live.

CHAP. XVI.

Of the Swelling and Pains of the Thighs and Legs.

IT is very eaſie for them that are acquainted with the Circulation of the Blood, to conceive the Reaſon why many big-belly'd Women have their Legs and Thighs ſwelled and pained, and ſometimes full of red Spots, from the ſwelling of the Veins, all along the Inſide of them, which extreamly hinders their going. Many think (which is in ſome meaſure true) that the Woman having more Blood than the Infant needs for its Nouriſhment, Nature, by virtue of the expulſive Faculty of the upper Parts, which are always more ſtrong, drives the Superfluity of it upon the lower, which are the Legs, as moſt feeble and apteſt to receive it, becauſe of their Situation: To explain it thus is ſomething to purpoſe; but I think the Circulation of the Blood will teach us better how this comes, than that we need to have Recourſe to this expulſive Faculty.

It is then thus, according to my Opinion: Following the ordinary Motion of the Blood, the Crural and the Saphene Veins receive into the mwhat is brought

to

to the lower Parts by the Arteries, and convey it along the Leg and Thigh, ascending still by the *Iliacks* towards the Heart, which are emptied into the *Cava*, to ascend again by it to the Heart, and so successively. This being so *de facto* (as need not be doubted, since it is a Verity founded upon Experience) when a Woman is with Child, and chiefly towards the last Months, and the Womb is much extended, and possesseth a great part of the lower Belly, then it begins to press the *Iliack* Veins by its Greatness and Heaviness, and so hinders the Blood from following its Course, and having its Motion so free, as before she was with Child: Which being so, the inferior Parts, which are the Crural and Saphene Veins, become swelled, much in the same manner as the Veins of the Arm do upwards when bound with a Ligature for Bleeding, or by any strong Compression upon the upper Parts; which happens, because the Veins being compressed, the Blood is there stopt, finding its Passage more difficult. The *Iliack* Veins being then so pressed by the Bigness and Heaviness of the Womb, all those of the Legs and Thighs swell in such a manner, as that they empty themselves into the Substance of the Parts, and throughout the five Coverings, which thence become swell'd; yea and these Veins, and amongst the rest the Saphenes, dilated and became viscous, sometimes from the inward and upper Parts of the Thigh to the very Extremity of the Foot, in which the Blood stagnating without its free Circulation, is altered and corrupted, which causeth great Pains and Swellings in all these Parts. This oftner befalls Women that are very sanguine, walk much, and use great Exercise, which, aided with a Fulness of the Vein, makes a Rupture of the Valvules, which serve to facilitate the Motion of the Blood: As the Suckers of a Pump, which retain the Water when it is raised thither: Which Blood falling down again, not being so supported, causeth by its Quantity and Stay, these Dilatations of the Veins, which are called *Varices*. For

For to remedy this, when a Woman hath her Veins dilated, let her only use, whilst she is with Child, a palliative Cure, in swaithing this *Varicos* part with a Swaith three or four Fingers broad, according to the Bigness of it, beginning to swaith from the Bottom, and conducting it upwards to the beginning of the *Varices*, that by this means these *Varicos* Veins, which are always outward, being moderately closed, should be hindred by this Compression from further dilating, and the Blood not be corrupted by the stay it makes there, which after this will not want its circular Motion. because the greatest part of it passeth then by the Vessels deeper placed. A Woman in this Condition should likewise keep her Bed, if she can, because by this Situation, her Body being equally lay'd, the Blood circulates much the easier, and is not then so much troubled to return by these Veins to the Heart, as when it must ascend by them, the Woman standing upright; which is the Cause the Legs always are more swell'd at Night than Mornings: If there be in any other parts of the Body Signs of Plenitude and Abundance of Blood, they may bleed her without Danger.

There are other Women, whose Legs only swell because of their Weakness, and not for the Reason just above mentioned, and are so *œdematous*, that when you press them with your Finger, the Print of it remains there; which is, because they want natural Heat, sufficient to concoct and digest all the Nourishment sent to them; and to expel the Superfluities of it, which by that means remaining there in great Quantity, leaves them so *œdematous*. For, to resolve these sort of Tumours, you may use a Lee made with the Ashes of Vines, and the Decoction of Melilot, Camomile and Lavender; afterwards they may be fomented with Aromatick Wine, in which they may moisten their Compresses to be laid upon them, repeating them three or four times a Day to fortifie them; which may be made with Rosemary, Bayes, Time, Marjoram, Sage, and La-

Lavender, of each an Handful; of Province-Roſes half a Handful; Pomegranate Flowers and Alum, each an Ounce: Boil them together in ſtrong Red-Wine, three Points, to the Conſumption of a third part; ſtrain it, and keep it for the Uſe above-mentioned. But ſince Pregnancy for the moſt part cauſeth theſe Tumors, they likewiſe ordinarily ceaſe when the Woman is brought to Bed, becauſe then ſhe purgeth forth the Superfluity of her whole Habit by means of her *Lochia*.

CHAP. XVII.

Of the Hemorrhoids.

THE menſtrous Blood, that uſed to be purged away every Month, being collected in a great Quantity near the Womb (which permits it not now to be evacuated by the uſual Paſſage, being ſo exactly cloſed during Pregnancy) is forced to flow back into the whole Habit, and chiefly upon the neighbouring Parts of the Womb, and cauſeth in many the Hemorrhoids both internal and external. All the ſeveral ſorts of them which we ſhall now deſcribe, may as well happen to them at this time as at another: But we will only ſpeak of that ſort which is cauſed by Pregnancy, becauſe our Deſign is only to make known ſome Particulars of the Maladies Women are in this Condition ſubject to.

Hemorrhoids are Tumors and painful Inflamations, ingendred by a Flux of Humours upon the Extremities of the Hemorrhoid Veins and Arteries, and are cauſed in great-belly'd Women by the abundance of Blood caſt upon theſe Parts, becauſe the Body at this time is not purged of its Superfluities, as accuſtomed before:

It

It is likewise very often caused by the great Endeavours that Women sometimes make to go to Stool when costive; because the Womb being placed upon the *Rectum*, hinders, by pressing it, the Excrements contained in it from being easily extruded; and by these Endeavours the Blood which is in the neighbouring Vessels, being likewise expressed, swells and blows up their Extremities, upon which comes these painful Inflamations, called Hemorrhoids, of which some are internal, some external, some small, and with little or no Pain, and some extremely big and painful. This may suffice for their general Differences, without coming to their Particulars, which would require a more ample Explication.

If they are small and without Pain, either internal or external, it is easie enough to prevent their further Growth, by Remedies which hinder and turn the Flux from these Parts: But there is more reason to cure the great and painful ones, by easing first the great Pain; for as long as that continues, the Flux is ever augmented. To this purpose, if the big-belly'd Woman have in the rest of her Body other Signs of Repletion, she may safely be once let Blood in the Arm, and sometimes (if there be great Necessity) twice, for to turn away the Humours, and to evacuate the Fulness, by which the Pain will be likewise appeased: If the gross Excrements retained in the Right Gut be the cause of it, and that she be costive, let her take an emollient Clyster of the Decoction of Mallows, Marsh-Mallows, Pellitory, and Violets, with Honey of Violets, to which may be added Oil of sweet Almonds, or sweet Butter; being careful to add nothing that may irritate, lest it augment the Disease, especially when they are inward Piles: And to the end the Woman may then the better receive the Clyster, 'tis fit that a small End of a Pullet's Gut be put upon the End of the Pip, to cover it on the outside, that so it may be put up the Fundament with less Pain, afterwards

let

let her keep a moderate and cooling Diet, and continue in Bed till this Flux of Humours be paſſed, and the mean time anoint the Piles with hot Strokings from the Cow, or foment them with the Decoction of Marſhmallows, White-broth, and Linſeed: Oyl of ſweet Almonds, Poppies, and Water-Lillies, well beaten together with the Yolk of an Egg, and ground in a leaden Mortar, are very anodine and proper to eaſe Pain; and if the Inflamation be great, anoint it a little with *Unguentum Refrigerans Galeni*, and *Populeon*, equally mixed.

After a good Diet, Bleeding, and the Application only of theſe cooling and anodine Remedies (Repercuſſives being not then to be uſed, leſt they repel the impure Blood, or harden the Piles) if their Swelling doth not abate, Leeches muſt be applied, to draw and empty the Blood there gathered; or they may be open'd with a Lancet, if ſoft, or any kind of Inundation: But Leeches are more proper for hard Piles, and as it were fleſhy, becauſe they do not put one to ſo much Pain as the Lancet: Altho' ſome Men, by the help of theſe Piles, have an Evacuation, almoſt natural, being relieved by it when they bleed moderately, Nature being accuſtomed to it: Yet it is not ſo in Women, but always contrary to Nature; becauſe the Evacuation which happens to thoſe Men by the Piles, ought always to be made by the Womb in Women, if not with Child; but being with Child, it may in ſome manner, in caſe the Woman be plethorick, ſupply alſo the Defect of the natural Evacuation; for, provided they bleed moderately, and without Pain, ſhe may thereby be alſo relieved: But if they flow in too great Quantity, there is Danger that both Mother and Infant will be weakned by it; and to avoid it, 'tis convenient to make aſtringent Fomentations with the Decoction of Granat Flowers, the Rinds of Pomegranates and Province-Roſes, made with Smiths Water, and a little Alum; or this Cataplaſm may be apply'd to it,

made

made with Bole-armonack, Dragons-blood, and *Terra Sigillata*, with the white of an Egg: As also to turn back the Blood from these Parts by bleeding in the Arm, and by dry Cupping-Glasses, applied to the Region of the Reins, and other Remedies convenient for this Distemper, and such as the Accident requires.

CHAP. XVIII.

Of the several Fluxes which may happen to a Woman with Child, and first of a Looseness.

THree several Fluxes may befal a great-belly'd Woman, to wit, the Flux of the Belly, the Flux of the Terms, and Floodings. We shall first speak of the Flux of the Belly, and afterwards we will examine the other two in the two following Chapters.

There are ordinarily reckon'd three sorts of Loosenesses, which in general is a frequent Dejection of what is contained in the Guts, by Stool: The first is called *Lienteria*, by which the Stomach and the Guts, not having digested the Nourishment received, lets it pass almost quite raw. The second is called *Diarrhæa*, by which they simply discharge the Humours and Excrements which they contain. And the third, which is the worst, is *Dysenteria*, by which the Patient, together with the Humours and Excrements, voids Blood with violent Pains, caused by the Ulceration of the Guts.

Of what kind soever the Flux is, if great, and continue long, it puts the Woman in great Danger of miscarrying; which *Hippocrates* tells us in the 34th Aphorism of his 5th Book, *Mulieri in utero gerenti, si alvus plurimum profluat, periculum est ne abortiat.* For, if it be a *Lienteria*, the Stomach not containing the Food

Food received, and letting it immediately pass away before it be turned into Chyle, of which Blood ought to be made for the Nourishment of Mother and Child, it is not possible but they must be both thereby extremely weakened for want of Nourishment. If a *Diarrhœa*, and continues long, it will occasion the same Accident: Because there is a great Dissipation of the Spirits, together with the Evacuation of Humours. But the Danger is much greater when a *Dysenteria*, forasmuch as the Woman hath then great Pains and Gripes in the Guts caused by their Ulceration, which excites them continually by constant Stimulations, to discharge themselves of the sharp and bilous Humours, with which they are extremely annoyed; which causes a great Disturbance and violent Commotion of the Womb, being placed upon the right Gut, and to the Child contained in it; and by the Compression which the Muscles of the Belly make on all sides, as also those that are made by them of the *Diaphragma*, which force themselves downwards in the Endeavours a Woman makes so often to go to Stool with pain, the Child is constrained, because of this Violence, to come before its time, which arrives so much the oftner, by how much these Stimulations and Needings are greater, as the same *Hippocrates* notes in the 27th Aphorism of his 7th Book, *Mulieri utero gerenti, si tensio supervenerit, facit abortum.* If there happens a Tenesm (saith he) to a Woman with Child, it makes her miscarry. This Tenesm is a great Passion of the right Gut, which forceth it to make these violent Endeavours to discharge it self, without being able to avoid any thing, but cholerick Humours mix'd with Blood, with which it is continually irritated.

When this Flux of the Belly happens to a big-bellied Woman, it is ordinarily, because they have always the Digestion of their Stomach weak, by reason of their bad Diet, which their strange Appetites cause them often to long for: By the continual use of which, being

being at length weakned, it suffers the Food to pass immediately without Digestion; or if it stay longer, it is converted into a corrupted Chyle, which descending into the Guts, irritates them by its Acrimony to discharge themselves as soon as they can.

Now to proceed safely to the Cure of these different Fluxes of the Belly (to which 'tis fit Care should be taken in good time, lest the Woman miscarry, as we have already said) the Nature of it must be considered, to the End the Cause, which maintains it, should be remedied. If it be a *Lienteria* following (as is usual) continual Vomitings, which have so debilitated the Stomach, and relaxed its Membranes, that having no longer Strength to vomit up that Food, it suffers it to pass downwards without Digestion: In this Case a Woman must abstain from all those irregular Appetites, and accustom her self to good Food of easie Digestion, and little at a time, that so her Strength may be able the easier to concoct and digest it; she should drink a little deep Claret-Wine, mixed with Water in which Iron hath been quenched, instead of *Ptisan*, which is not proper in this Case, provided she have not a strong Fever; for if it be but a small Fever, Wine on this manner is to be preferred, forasmuch as the fewer she hath at that time, is but symptomatick, caused by this Debility of Stomach, and will vanish as soon as this is fortified; which will be yet more promoted, if the Woman before and after Meals takes some Corroboratives, as a little of that Burnt-Wine we mentioned for the Cough in the 15th Chapter of this Book; or a little good Hippocras, or right Canary, of any of them according to her Pallate; neither will it be amiss if she eats a little good Marmalade of Quince before Meals: She may likewise wear upon the Pit of her Stomach a Lamb-Skin with the Wooll, for to preserve it, and augment its natural Heat, which is very necessary to digest Food;

Food; * obſerving above all, to give no purging Medicine, when this Flux is only cauſed by Weakneſs, leſt it be thereby augmented.

* *Not always a good Caution.*

If it be a *Diarrhæa*, and only an Evacuation ſimply of ſuch Excrements as are retained in the Guts, and ſome ſuperfluous Humours, which Nature hath ſent thither to be expelled, and that it continue no long time, and is gentle; the Woman will find no Inconvenience by it; nor is ſhe in that Danger as when it paſſeth thoſe Bounds; and therefore 'tis good to leave the Operation to Nature, without interrupting it in the Beginning; but if it continues above four or five Days, it is a Sign then that there are ill Humours contained and cleaving to the Inſide of the Guts, which provoke them often to be diſcharged, and ought to be removed with ſome purging Medicine that may looſen and evacuate them, after which the Flux will certainly ceaſe, ſome light Infuſion of Senna and Rhubarb, with Syrup of Succory, or an Ounce of *Diacatholicon*, with a little Rhubarb for a Bolus, to be taken in a Wafer.

But if, notwithſtanding fit Purges and a regular Dyet, this Flux continues, and changes into a *Diſenteria*, the Patient voiding every Moment bloody Stools, with much Pain and Needing, ſhe is then in great Danger of miſcarrying, and its Prevention ought to be endeavoured, if poſſible. Therefore, after having purged away the ill Humour, (with the Medicines above-mentioned) which were in the Guts, and hindring, by a good Dyet, that no more be engendred; to which purpoſe let her uſe good Broths made of Veal or Chicken, with cooling Herbs, to temper the Acrimony of theſe hot Humours; let her eat Pap with the Yelk of an Egg new layed, being well boiled: Such Dyet ſoftens and ſweetens the Guts within. Let her Drink be Water, in which Iron or Steel was quenched, with a little Wine, if ſhe be not ſe-

verish, for then half a Spoonful of Syrup of Quince or Pomegranates is better to mix with the foresaid Water; She may likewise eat a little Marmalade of Quince, or other Astringents and Strengthners, provided her Body was well purged before: and because there is always in these Fluxes great Pains and Gripes all over the Belly and Guts, and chiefly the *Rectum*, all the Humours being discharged upon it, which irritating it extreamly, causeth continual Stimulations, that ought to be appeased (if possible) to prevent Abortion, and may be effected by * Clysters made of the Broth of a Calves-head, or Sheeps-head well boyled, mixing it with two Ounces of the Oil of Violets; or else of good Milk, mixed with the Yolk of a fresh Egg. After the use of these strengthning and anodine Clysters, as long as is judged necessary, which the Patient ought to keep as long as she can, the better to appease these Pains, you must proceed to the use of Deterfives, made with the Decoction of Mallows, and Marsh-Mallows, with Honey of Roses; and afterwards astringent Clysters, in which must be neither Oil nor Honey mixed, because they relax instead of binding; beginning first with the gentlest, made with Rose-water, mixed with Lettice and Plantain-water; afterwards to stronger, composed with the Decoction of the Roots and Leaves of Plantain, *Tapsus Barbatus*, Horse-tail, with Province-Roses, the Rind of Pomegranates in Smiths-water; to which may be added, of *Terra Sigillata*, and Dragon's-blood, each two Drams. You may likewise foment the Fundament: But there must be care, before you come to use the strong Astringents, that the Woman be first well purged with the Remedies before-mentioned, lest (as the Proverb is) the Wolf be shut in with the Flock; and, endeavouring to prevent Abortion, the Death of the Mother, and consequently of the Child, be caused by a greater Mischief: Retaining

* *As before observed, better omitted.*

Retaining within abundance of ill Humours, of which Nature would willingly be discharged: All which may be avoided, if what I have said be well observed.

CHAP. XIX.

Of the menstruous Flux.

Hippocrates, in the *60th* Aphorism of his *5th* Book, saith, *Si Mulieri utero gerenti Purgationes prodeant, impossibile est fœtum esse sanum*; If a big-bellied Woman have her Courses, it is impossible the Infant can be in Health. This Aphorism must not be taken literally, but must be understood when they come down immoderately: For tho', according to the most general and natural Rule, the Courses ought not to flow when a Woman is with Child, because their ordinary Passage is stopt, and also because the Blood is then employed for the Nourishment of the Infant, of which, if it flows away, it is defrauded, and consequently much weaken'd: Yet there are some Women, who notwithstanding they are with Child, have their Courses till the *4th* or *5th* Month; about which time, the Infant being already pretty big, draws a good Quantity of Blood for its Nourishment; wherefore there cannot so easily remain a Superfluity, as when young with Child. I knew one that had four or five living Children, and had, of every Child, her Courses duly from Month to Month, as at other times, only in a little less Quantity, and was so till the *6th* Month; yet notwithstanding, she was always brought to Bed at her full time. I likewise saw another, who not believing she was with Child, because she had her Courses; and finding her self out of order, because she had conceived, imagining it was some other Distemper, prevail'd with her Physician to bleed and purge her very

often, which he did, till he had indeed cured her; but 'twas after she had miscarried, being three Months gone. This Evacuation usually befals very Sanguine or Phlegmatick Women, who breeding more Blood than the Infant hath need of for its Nourishment at the Beginning, discharge themselves at those times of that superfluous Quantity, more or less, according to their Dispositions, but not by the Bottom of the Womb, as formerly when they were not breeding, because those Passages are effectually closed by the After-birth which adheres to it, and the Womb is then exactly close; by a couple of Branches which Nature (provident and careful of the Preservation of Individuals, as well as of the Kind) hath destin'd to this Use, which proceed from the Spermatick Vessels, which (besides those they send to the Testicles and other Parts) before they arrive at the Womb, divide themselves on each side into two Branches very considerable; of which, the one terminates in the Fund of the Womb, by which the Courses pass, when the Woman is not with Child; and the other, not entring there, couching along the Body of it, is terminated in the side of the Neck of the Womb, by which the Courses are discharged, whilst they are breeding, in case the Woman be plethorick.

When a Woman voids Blood downwards, it must carefully be considered whence it proceeds, and in what manner; whether it is the ordinary Courses, or a real Flooding: If it be the ordinary Courses, the Blood comes away periodically at the accustomed times, and flows by Degrees from the Neck, near the inward Orifice of the Womb, and not from its Fund; as may be discovered, if trying with a Finger one finds the inward Orifice exactly closed; which could not be, if the Blood proceeded from the Bottom, as also if it proceeds without Pain; all which Circumstances do not meet in a Flooding, but others very different, as will appear in the following Chapter. It must likewise

wiſe be conſidered, whether theſe Courſes flow, only becauſe of the Superfluity, or becauſe of the Acrimony of the Blood, or the Weakneſs of the Veſſels which contain it, that ſo fit Remedies may be apply'd. If they proceed from the ſole Abundance, being more than the Fruit can conſume for its Nouriſhment, it is ſo far from hurting either Mother or Child, that being moderate, it is very profitable to them; becauſe if the Womb were not diſcharged of this ſuperfluous Blood, the Fruit, which is as yet but little, would be drowned by it, or, as it were, ſuffocated: And if it ſhould chance that they were unduly ſtopt or retained, Bleeding will ſupply the Defect of the natural Evacuation, which ought to have been; but if there be no Sign of Abundance or Plenitude, and that before ſhe was with Child ſhe had her Courſes in a ſmall Quantity, which ſtill continue to flow after ſhe hath conceived, it is a ſign that the Flux proceeds from the Heat and Acrimony of the Blood, or the Weakneſs of the Veſſels appointed to receive it. It is of this ſort of Women that *Hippocrates* pretends to ſpeak, in the *6th* Aphoriſm before-mentioned, whoſe Children cannot be healthful, when their Courſes flow, whilſt they are Breeding; becauſe there remains not Blood enough behind for her, and the Nouriſhment of her Infant, which puts her in great Danger of miſcarrying; for as the Proverb ſaith, *Hunger drives the Wolf out of the Wood*; ſo likewiſe want of Nouriſhment forceth the little Priſoner out of his Hiding-place before his time.

To hinder this Flux from effecting ſo evil and ſiniſter an Accident, the Woman muſt keep her ſelf very quiet in Bed, abſtaining from all things that may heat her Blood, ſhunning Choler above all the Paſſions of the Mind, uſing a ſtrengthning and a cooling Diet, feeding on Meat that breeds good Blood, and thickens it; as are good Broths made with Poultry; Necks of Mutton, Knucles of Veal, in which may be boiled cooling Pot-herbs; new-lay'd Eggs, Gellies, Rice-Milk,

Barley-broths, which are proper for her: Let her Drink be Water in which Iron is quenched, with a little Syrup of Quince: She must refrain from Copulation, because by heating the Blood, it excites it to flow more. If notwithstanding all this the Flux continues, some commend large Cupping-Glasses under the Breasts, to make a Revulsion, and to turn the Blood; according to *Hippocrates's* 50*th* Aphorism of the 5*th* Book, *Mulieri si velis menstrua sistere, cucurbitulam quam maximam ad Mammas appone:* But it will do no great Matter; however, to satisfie the Patient, and to shew that nothing is omitted that may make for her Cure, they may be apply'd. I should rather choose to make this Revulsion by bleeding in the Arm, if her Strength permitted: And because in this Condition the Child is very weak through this great Evacuation, it must be fortify'd, by applying to the Mother's Belly, about the Region of the Womb, Compresses steep'd in strong Wine, in which is boiled a Pomegranate, with its Peel, Province-Roses, and a little Cinnamon: But the best way to strengthen it, is to correct the Mother's Blood, and hinder its Evacuation.

CAAP. XX.

Of Floodings.

THere is a great Difference between the menstruous Blood, of which we have discoursed in the preceding Chapter, which happens sometimes to Women with Child, and this Flooding which we have now in hand: For (as I have said) the Courses come periodically at the times accustomed, without Pain, distilling by little and little from the Neck of the Womb, during Pregnancy, after which it totally ceaseth: But much

much the contrary, this Loſs of Blood comes from the Bottom of the Womb, with * Pain, and almoſt of a ſudden, and in great abundance, and continues Flooding daily, without Intermiſſion, except that ſome Clods (formed there) which ſeem ſometimes to leſſen the Accident, by ſtopping for a little time the Place whence it flows; but ſoon after it returns with greater Violence, after which follows Death both to Mother and Child, if not timely prevented, by delivering the Woman, as ſhall be hereafter declared.

* *Sometimes.*

If this Flooding happens when young with Child, it is uſually becauſe of ſome falſe Conception, or Mole, of which the Womb endeavours to diſcharge it ſelf, by which it opens ſome of the Veſſels in the Bottom of it, from whence the Blood ceaſeth not to flow, until it hath caſt forth the ſtrange Bodies it contained in its Capacity; and the hotter and ſubtiler the Blood is then, the more abundantly it flows. But when this Flooding happens to a Woman truly conceived, at whatſoever time it be, proceeds likewiſe from the opening of the Veſſels of the Fund of the Womb, cauſed by ſome Blow, Slip, or other Hurt, and chiefly becauſe the *Secundine*, in ſuch Caſes, and ſometimes in others, is ſeparated in part, if not totally, from the Inſide of the Bottom of the Womb, to which it ought to adhere, that it might receive the Mother's Blood, appointed for the Infant's Nouriture, by which Separation it leaves open all the Orifices of the Veſſels where it was joined, and ſo follows a great Flux of Blood, which never ceaſeth (if ſo cauſed) till the Woman be brought to bed: For the *Secundine* being once looſened, altho' but part of it, never joins again to the Womb to cloſe thoſe Veſſels, which can never ſhut till the Womb hath voided all that it contained: For then compreſſing and cloſing it ſelf, and as is were entering within it ſelf (as it happens preſently after Delivery) the Orifices of the Veſſels are cloſed and

stopt up by this Contraction, whereby also this Flooding ceaseth, which always continues as long as the Womb is distended by the Child, or any thing else it contains, for the Reason aforesaid; much like to a Sponge, whose Pores or Holes being very large when swelled, disappear and close with their own Substance when squeezed and compressed; so likewise by this Contraction of the Matrix (which during Pregnancy became as it were spongeous) in the Place whence the *Secundine* was separated, the Orifices of the Vessels are closed, assoon as it is cleansed from whatsoever it contained in its Capacity.

Altho' I have said, that a Woman in this Condition, for the Reasons alledged, must necessarily be delivered, that the Flooding may be stopt, I do not intend it should be done as soon as perceiv'd; because some small Floodings have sometimes been suppressed, by keeping quietly in Bed, bleeding in the Arm, and the Use of the Remedies specify'd in the precendent Chapter; it may likewise be but an ordinary and menstruous Flux. If then, the Blood flows but in small Quantity, and continues a little while, 'tis good leaving the Labour to the Work of Nature, provided the Woman hath sufficient Strength, and that it be accompanied with no other evil Accident: But when it flows in so great abundance, that she falls into Convulsions and Faintings, then the Operation must not be deferr'd; and 'tis absolutely necessary she should be deliver'd, whether she be at her Reckoning or no, whether she have Pains or Throws, or not; because there is no other way to save her Life and the Child's, but presently to do it. *Externam fundet cum sanguine vocem*; she casts forth with her Blood her last Breath. *Hippocrates* knew very well the Danger of it, when he said in his 56th Aphorism of the 5th Book, *In fluxu muliebri si convulsio & animi defectus advenerit, malum*: If Convulsions and Faintings follow Floodings, it is a bad sign.

There

There must not always in these unfortunate Accidents be expected Pains and Throws to force and bear down, to forward Labour; for tho' they come at the beginning, they usually cease assoon as the Flooding comes to *Syncope*'s and Convulsions; neither must it be deferr'd, till the Womb be enough opened, forasmuch as this Effusion of Blood very much moistens it, and the Weakness relaxeth it, so that it may be then as easily dilated as if there had been abundance of strong Throws. Wherefore, having placed the Woman in the Situation we shall direct when we treat of Deliveries, let the Chirurgeon, having his Hands anointed with Oil or fresh Butter, introduce his Fingers joined together, by degrees into the Matrix, and spread them, open the one from the other when they are in the Entry, for to dilate it sufficiently by little and little, without any Violence, if possible; which being done, and his Hand quite within, if he finds the Waters not broke, let him break them, and then whatsoever part of the Child presents, tho' the Head (provided it be not just in the Birth) let him search for the Feet, and draw it forth by them (observing every Circumstance, that shall be shewn in the 14th Chapter of the second Book, where is described the way how to deliver a Woman, the Child coming with the Feet first) because there is better hold, and more easy to deliver by them, * than by the Head, or any other part of the Body. Wherefore if the Feet lie not ready, the Chirurgeon must seek for them, which at that time is easier done than at another, because the great Flooding makes the Womb loose and slippery by its Humidity, so that it will not be difficult for him to turn the Child, and bring it by the Feet, as we have even now said; after which he must fetch the After-burthen, which in these Cases cleaves but little, being careful not to leave so much as a Clod in the Womb,

* *Without it could be done without Hooks, as mentioned in the Preface of the Translator.*

Womb, lest it still continue the Flooding; which being done, it will soon after stop, with all the Accidents, if too much Time was not spent before the Operation.

Many Women and Children have perished for want of this Operation in this ill Accident; and many others have escaped Death (which else must certainly had followed) by being timely succoured.

Guillimeau, in *Chap.* 13. of his 2*d* Bood of happy Deliveries, makes mention of six or seven Histories to confirm this Verity, in some of which we may find the Women and their Children bloody Victims of it, for not having been in the like Case delivered, which others, by a seasonable Delivery escaped: And the better to confirm it by my own Experience, I will recite you one amongst the rest, very remarkable, of the Remembrance of which I am so sensible, that the Ink I write with at present, to publish it to the World for their Profit, seems to me to be Blood, because in this sad and fatal Occasion, I saw part of my self expire.

About three Years since, one of my Sisters, not yet one and twenty Years of Age, being about eight Months and a half gone with her fifth Child, and then very well in Health, was so unfortunate as to hurt her self (tho' at first small in Appearance) by falling on her Knees, her Belly a little touching the Ground by the Fall; after which she passed a Day or two, without perceiving any great Alteration, which made her neglect to repose her self, being very necessary for her; but the third Day, or thereabouts, after her Hurt, about Eleven in the Morning, she was suddenly surprised with strong and frequent Pains in the Belly, which were immediately followed with Floodings; this made her presently send for her Midwife, who no better understanding her Office, told her she must have Patience, till the Womb had dilated it self by the Pains, before she could be delivered, assuring her fur-

further, that she had no Reason to be afraid, and that she should be quickly freed from the Danger, because her Child came right: She made her thus hope in vain three or four Hours, until, the Flooding still continuing violently, the Pains began to cease, and the poor Woman fell into frequent Faintings, * and then the Midwife desired a Chirurgeon to advise with in this Case: They immediately sent to my House for me, but unfortunately missing of me, they sent for him, whom they judged the ablest of all the Chirurgeons that practised Midwifery in *Paris*, and immediately conducted him to my Sister's, where he arrived about four in the Afternoon, and having seen her, † contented himself with only saying, *She was a dead Woman, and that nothing was to be done to her, but to give her all the Sacraments, and that absolutely she could not be delivered*; which likewise the Midwife jointly concluded, who believed that the Opinion of a Man so authentickly esteemed of all, must be infallible. Assoon as he had delivered this Pronostick, he immediately returned home, and would by no means stay longer, but left this young Woman in that deplorable Condition without any Succour, whose Life he had certainly saved with her Child's, if he at that time had delivered her, which was very easie to be done, as will plainly appear by the Sequel of the History. After the Advice of a Person of so great Reputation, together with that of the Midwife, since Monsieur *N.* * could do nothing, there was no other Remedy for so great a Danger, but to

* *When the Danger was obvious to every Body, but Midwives ought to discover the danger sooner*

† *It were to be wish'd rather than hoped for, that Practitioners in this and other the like dangerous Cases, (whereof they have no certain Knowledge) would consult, and not destroy one or more, by undertaking what they cannot well perform, or discourage Patients from sending for other Help and Advice; putting Life in Ballance with their Reputation.*

* *The great Mischiefs which happen by the Prognosticks of*

of ſuch who have the Luck, tho' they want the Merit to be eſteemed.

to hope in God alone, who is Almighty. They therefore endeavoured to comfort my poor Siſter as well as they could, who longed for nothing more than to ſee me, to know whether I would paſs the ſame Sentence; and whether her Danger, which ſtill augmented more and more, was without Remedy (for her Blood flowed away continually in great Abundance.) At length I returned home, where they had been long before to tell me this bad News, tho' by Misfortune could not find me (as I ſaid before) which as ſoon as I underſtood, I immediately haſtned to her with all poſſible ſpeed, where I ſaw, aſſoon as I came in, ſo pitiful a Spectacle, that all the Paſſions of my Soul were at the Inſtant agitated with many and different Commotions; having afterwards a little recovered my Senſes, I drew near to my Siſter's Bed, where they had juſt given her the laſt Sacraments, and ſhe conjured me very often to give that Succour, which ſhe ſaid ſhe only expected from me. After that I had underſtood from the Midwife all that had paſſed, and the Opinion of the Chirurgeon that had ſeen her above two Hours before (for it was then ſix a Clock) I perceived the Blood to flood continually in great Abundance and without Intermiſſion, of which ſhe had already loſt above * three Quarts: And which was very remarkable, above twelve ſmall Porengers, in the two Hours after the Chirurgeon was returned, as it ſeemed to me by the number of Napkins and other Clothes, which were all muck wet with it; which Blood had ſtayed in her Body, and ſaved her Life, if ſhe had been then delivered: I ſaw likewiſe that ſhe grew every Moment weaker and weaker, which convinced me that ſhe was then in more danger than ſhe would have been, if they had not let ſlip the Opportunity of delivering her two or three Hours before, as it was poſſible and eaſy; becauſe ſhe had

* *French Quarts are Engliſh Pottles.*

then

then almoſt all her Strength ſhe afterwards loſt with the reſt of her Blood, which all along flooded away; and deſirous to know whether they could have delivered her, I found by trying her Body, that the inward Orifice of the Womb was dilated in ſuch ſort that I could eaſily introduce two or three Fingers, and having marked it, I made the Midwife try again to ſee whether the Orifice was ſo diſpoſed when the Chirurgeon ſaid that ſhe could not be delivered, and whether ſhe was of his Opinion. She told me it was ſo, and that it had been always in the ſame Condition from the time of his Departure. Aſſoon as ſhe had made me this Declaration, I eaſily perceived his Ignorance, and where the Shoe wring'd him.

Wherefore I told her, that I wondred much they were both of that Opinion, ſeeing that in Truth it ſeemed quite contrary to me, becauſe it was at that time moſt certainly very eaſie for him to have delivered her, if he had pleaſed, as it ſtill was, and what indeed I would have done at that very Moment, if it had been poſſible for me to have had Power enough over my Spirit, which wavered a long while about the Reſolution I was conſtrained to take, after I had loſt the Hopes of all other Help. That which hindred me, was not ſo much the Prognoſtick that ſo famous a Chirurgeon had made, in perſwading all the Aſſiſtants, that ſhe could not be delivered (tho' it might ſeem raſh to oppoſe the Sayings of ſuch as are eſteemed Oracles) neither was it the little Strength the Patient had then left: But it was chiefly the Relation of the Perſon, being my Siſter, whom I tenderly loved, which troubled my Spirits with ſuch different Paſſions, to ſee her before me ready to expire through the prodigious loſs of Blood, which proceeded from the ſame Spring as mine own, that it was impoſſible for me at that Moment to reſolve, and obliged me to ſend again to the Chirurgeon (who not long ſince returned home) to entreat him to come back again to the Houſe, that

(my

(my ſelf demonſtrating to him the Facility I found for the Operation, and make him underſtand and confeſs that in thoſe Caſes there is no hope, unleſs it be undertaken as ſoon as may be) I might perſwade him to deliver her, rather than to abandon the Mother ſo, to the Deſpair of her Life, as he had done, and to ſuffer the Infant to periſh with her unbaptized; which had been prevented if he had done what Art required, which is at leaſt (when both cannot be ſaved) to ſave the Child, if poſſible, without Prejudice to the Mother, which was very eaſie, as you ſhall preſently underſtand: But no Prayers nor Sollicitations could ever prevail with him to return, excuſing himſelf, that it was impoſſible for him to do any thing in the Caſe. When this was related to me, I ſent yet again to another Chirurgeon, one of my Companions, being a little more obliging and ſerviceable, whom, if he had come time enough, I would have convinced of the Neceſſity of the Operation, and made him acknowledge the Facility of it: But by Misfortune he was abroad. During all theſe Goings and Comings, there was an Hour and half ſpent, which time ſhe flooded without Intermiſſion, and her Weakneſs grew more and more: Wherefore ſeeing my ſelf without Hopes of getting the Perſons I ſent for, I reſolved to deliver her preſently, which before was beyond my Power, for the Reaſons recited, and indeed was now a little too late for the Mother; for, if I could have commanded my Paſſions to have done it at the Inſtant I arrived, there would then have been great Hopes to have ſaved her, as well as I did the Child: After I had thus prepared my ſelf for it, that is, having directed two of my Fingers into the inner Orifice of the Womb, being open enough to admit them into it, I did in a little while after introduce a third, and by Degrees the Ends of all the five of my Right Hand, with which I dilated the Orifice ſufficiently to admit it quite in, as it is very eaſie in the like Caſe, becauſe the Abundance of Blood

Blood moiſtens and relaxeth extreamly (as is already mentioned) the whole Womb; into which having ſo gently entred my Hand, I found the Child came right, and the Waters not yet broken; wherefore I preſently broke the Membranes with my Nails and Fingers, and then turning the Child, I took it by the Feet, and brought it forth very eaſily, after the manner I ſhall teach in the forementioned 14*th* Chapter of the 2*d* Book; all which I finiſhed in leſs time than a Hundred could be counted, and do conſcientiouſly proteſt never to have deliver'd a Woman ſooner in all my Life, of thoſe whoſe Children came againſt Nature, nor eaſier, and with leſs Violence to the Mother, who did not in the leaſt complain during the Operation, altho' ſhe had her Senſes very well, and exactly knew all I did to her, and found her ſelf very much comforted as ſoon as ever ſhe was deliver'd, and immediately after the flooding began to ceaſe: As to the Child, I brought it alive, and it was preſently baptized by a Prieſt that was in the Chamber. The poor Patient, and all the Company preſent (which were in great Number) found then manifeſtly that the Chirurgeon and Midwife, who ſaid ſhe could not be delivered, had but little reaſon to aſſure any ſuch thing.

The Operation was finiſhed time enough for the Child's Baptiſm, which (praiſed be God) it received; but too late to ſave the Mother's Life, who (having before loſt all her Blood) dy'd an Hour after ſhe was ſo deliver'd, by the ſame Weakneſs that ſhe often fell into before ſhe was delivered. The flooding indeed ceaſed preſently, but ſhe had not Blood enough left, to enable her to reſiſt thoſe frequent Faintings, which ſhe might have done, as may probably be conjectur'd, if the Chirurgeon that firſt ſaw her had deliver'd her three long Hours before, as without doubt he might as eaſily have done as I; in which time ſhe loſt above 20 * ſmall Porengers of Blood, of which four

* *Each Porenger contains about four Ounces.*

four or five possibly might have been sufficient to have saved her Life, she being a young Woman of a very good Constitution, having no Inconvenience or Sickness when she was surprized with this fatal Accident, which befel her (as aforesaid) about eleven in the Morning, and she was delivered about seven at Night; and because she had lost so much Blood before the Operation, it prov'd unprofitable, she dying an Hour after, having her perfect Senses to the Moment she expired, which was about Eight the same Night.

I will upon this lamentable Subject (to the end more Care may be taken in the like Cases) examine, by way of Digression, what might be the Motive of this Proceeding of the Chirurgeon, and of some others of the same Humour. It must necessarily be agreed, that it was for one or more of these three Causes, why either he would not, or could not lay this Woman, when he saw her two Hours before me, which, as I noted before, might easily have been done: It was either through Ignorance, Malice or Policy: To imagine it is his Ignorance, I cannot perswade my self, because he hath too great Reputation for that, altho' many Persons that understand the Art very well, easily agree with me, that he is of the Number of those, of whom may be justly said, *Minuit præsentia famam.* That it was through Malice, who can imagine a Man of so detestable a Resolution could be found! But if it were neither Ignorance nor Malice, it is easie to guess it a damnable Policy, qualify'd by some with the Name of Prudence; * this false Prudence they ordinarily use that are in great Reputation, ever endeavouring to their utmost to shun dangerous Cures, lest they that understand not the Art, should quit the good Opinion they had of them, when it happens that the Patient dies under their Hands, altho' they were carefully and duly

** A good Warning not to rely too much upon the Advice of such famous Practitioners or Midwives, that prefer their Reputations above their Consciences.*

ly delivered. This was just our Misfortune; for this Chirurgeon, who was very much esteemed by many Women of Quality whom he delivered, avoided, all he could, dangerous Labours, subject to ill Success, as this was; and the rather then, because there was in my Sister's Chamber a Lady of Quality, Wife to one of the chief Captains of the Guards, who dwelt in the same House, and whom he ordinarily delivered; which was the cause, that, believing the Issue of the Operation doubtful, he chose rather to preserve the Esteem of his ancient Practice, amongst such as understood not the Business so well as to be Judge of his Proceedings, than to do in this Case his Christian Duty; to which one ought always to have more regard, than to all the Interests of vain Reputation, which usually corrupts the Conscience. They that make use of this Policy are often accessory to the Death of poor Women who call for their Assistance; and of their Children also.

I was willing to recite every Circumstance of this Tragedy, that one may know in the like Case the Necessity of a speedy Delivery. I have since that had many in the same Case, to whom (by the Assistance of God) I warranted the Lives of the Women, and saved the Children; of which I had in my self more Satisfaction, than I could have gained by all the Honour the World could procure me by so wicked a Policy; which neither Chirurgeon nor Midwife of an upright Conscience will ever use.

Now since in all Floodings there ever follows Weakness and Faintings, we must endeavour to preserve that little Strength the Patient hath left, and augment it if possible; that so they may have sufficient to endure the Operation, and to escape afterwards: To which purpose there ought to be given her, from time to time, good strengthning Broths, Gellies, and a little good Wine: She must always smell to Rose-Vinegar, and have a warm Toast dipt in Wine and Cinamon,

namon, applied to the Region of her Heart; which will do her more good than solid Food; for, as *Hippocrates* saith in the 11th Aphorism of his 2d Book, *Facilius est potu reficí, quam cibo,* One is sooner nourished by Drink than Meat; because the liquid Aliments are much sooner distributed than the solid: And to prevent the Blood from flooding in great abundance till she can be delivered, * a Vein in her Arm may be opened, to turn a little the Course backwards; and apply all along her Reins, Napkins wet in Water and Vinegar. But if the Flooding proceeds from the Separation of the After-burthen from the Womb, as my Sister's was, all these Things are to little purpose; and the best Expedient is, to deliver the Woman as soon as may be, tho' she were but three or four Months gone with Child, or less; because all ought as well to be brought away, whatever is within the Womb, whether it be false Conception, Mole, or Child, without leaving any Thing behind, which when it is quite cleared, closing and contracting it self, stops the Flooding, for the Reasons above alledged, and all Accidents which were caused by it; whereby the Woman afterwards recovers, if there be but sufficient Strength remaining after Delivery, as certainly will be, if not delay'd too long.

* *Rather the Ligatures above the Elbows, because too much Blood is already lost.*

CHAP. XXI.

Of the Weight, bearing down, or Relaxation of the Matrix, which hinders a Woman with Child in her Walking, and Freedom of Coition.

MAny Women with Child find an extraordinary Weight at the Bottom of their Bellies; which comes, because the Womb, by the Weight it contains in

in its Capacity, bears down upon the Neck, and sometimes so low, that they cannot walk without Pain and Stradling; at which time also they cannot use Copulation, but with great Inconvenience.

The bearing down of the Womb is when it only falls into the *Vagina*, without coming in the least forth of the Privities, for then it is called the falling out, or *Precipitation*; which is a more troublesome and dangerous *Disease*, and doth not usually befal Women with Child, because the Extent and Bigness of the Womb hinders it, that it cannot fall out, but only bears down. The *Precipitation* is discern'd by the View; and the bearing down easily, by putting up a Finger into the *Vagina*; for there the Womb will be soon met with, and its inner Orifice, which is very near the Privities, especially when the Woman stands upright. This bearing down is * often caused by the Relaxation of the † Ligaments of the Womb, and chiefly the ‖ large ones, which ought to fasten it on each side towards the Loins, to prevent it; which Relaxation comes either from the Weight of the Burthen it bears and contains within, constraining these Ligaments to be extended more than ordinary; or from some * Fall, which by much shaking of it produceth the same Effect, and so much the easier, by how much the Burden is greater; and likewise from great Pains or bad Labour, which preceded the present Pregnancy: Or very often it is caused, or at least facilitated, by abundance of Humours, which moistning the Ligaments, relax them in that manner, to which the Phlegmatick are very subject, who usually are much troubled with the Whites.

* *Always.*
† *Numb. 4.*
‖ *He meant the flat ones, in Opposition to the round ones.*

* *A Fall cannot cause the bearing down any other way, than by straining the Ligaments; the same is to be said of Pains or bad Labour.*

Besides the Hindrance which the bearing down of the Womb causeth to the Woman's Walking and Use

of Coition (as we have above-mentioned) it causeth likewise by its Weight, principally towards the latter end of her Reckoning, a Numbness in her Hips, Sleepiness in her Thighs, as also Difficulty of Urine, and going to Stool; because by bearing down it presseth down the * Bladder, and the great † Gut, between both which it is situated. The Patient may be much easier cured of this bearing-down, after she is brought to Bed, than whilst she is with Child; for being freed from its Burden, its Ligaments will be the easier fortify'd; besides she may then use Pessaries to keep it in its Place, which cannot so well be done when she is with Child.

* *Rather the Neck of the Bladder.*
† *Rectum.*

From what Cause soever this bearing-down proceeds, the best Remedy for a big-belly'd Woman is to keep her Bed, because the Weight of it doth more and more relax the Ligaments when she is up: And if she hath neither the Means nor Convenience so to take her Rest, at least let her, if her Belly be big enough, as it is towards the latter end of her Reckoning, wear a Swaith very broad and fit for the purpose, that by this means the Burden being a little supported, the Ligaments may not be so much stretched and lengthened; and if she have a Difficulty in making Water, let her when she would do it, help her self, by lifting up with both Hands her Belly before, which will be a great Ease, and hinder the Neck of the Bladder from being so much compressed; but if the Humours cause this Relaxation of the Ligaments of the Womb, she must keep her self to a drying Diet, her Food being rather roasted than boiled, and must refrain Copulation. The Woman must not be strait-laced, * because that also forceth down the Matrix; and above all, when she is in Labour, Care must be taken, that neither by means of the Throws, which strongly force down the Womb, nor by the Birth of the Child, nor the violent Extraction

* *Seldom.*

ction of the Burden, she gets a Precipitation instead of a bearing-down; which is soon done, as is seen often, when the Method I teach in the 16th Chapter of the second Book (where I treat of this Labour) is not well observed.

CHAP. XXII.

Of the Dropsy of the Womb, and the œdematous Tumours of the Lips of the Privities.

THERE are many phlegmatick Women, who certainly believing themselves with Child, void nothing but Water, which was collected together in their Womb, and is called the Dropsy of the Womb. It hath often happen'd, that such a Disease hath deceived the Midwives as well as the Patient, who having a long time hoped, and been indulged in their Hopes of a Child, at length, instead of it, find nothing but clear Waters; as it once did to that Wood-Merchant (I mentioned in the 13th Chapter of this first Book) who at the end of nine or ten Months, labouring under such a false Belly, voided a Quantity of these Waters, being all that was contained and inclosed in the Womb. *Guillemeau*, in the first Chapter of his first Book of Labours, makes mention of the like History, of one Madam *du Pescher*, who voided a Pailful of Water, certainly believing her self to be with Child: And *Fernelius*, in the 15th Chapter of his 6th Book of *Pathlogie*, recites a Case much more wonderful, concerning these Dropsies. He tells us, that he saw a Woman, who at the times of her Purgations, cast forth by the Neck of the Womb so great a Quantity of Water, very hot and yellowish, that she filled six or seven Basins; and voided so much of it, that her Belly grew

flat, after which her Courses came immediately in order; and in the following Months the like Quantity was again collected, which afterwards came away as before, and that this Woman (which is most observable) being cured of this Indisposition, conceived with Child, and was brought to Bed of a living Child.

These Waters are either bred in the Womb, or brought thither from some other Part, as in the Dropsy of the Belly it passeth by Transudation through the porous Substance of the Membranes of the Womb. They are bred in the Womb, when it is too cold, or too much debilitated by an ill and violent Labour preceeding; or, because the Filth, as Whites or other Superfluities which it was accustomed to discharge it self of, hath a long time been suppressed. When the Waters contained in the Capacity of the Womb have been sent thither from elsewhere, they are then never wrapt in a particular Membrane, but only retained by the exact Closure of its Orifice, and flows away as soon as it begins to open: But when they are bred in the Womb (which is for the most part after Copulation, if the Seed be either too cold, waterish, or corrupted) they are then sometimes contained within Membranes, which hinders the Patient from a speedy discharging of it, she going with it as long almost as with a Child: And this is the Dropsy which perswades them sometimes they are with Child.

'Tis easie to avoid the mistaking the Dropsy of the Womb for a Child, by careful observing all the Signs mentioned in the Treatise of a true Conception, which concur not in this Disease. The Patient hath indeed her Belly swell'd, and her * Courses stopt in this Case as well as if she were with Child, but there are many things which will discover to us the Difference; for in the Dropsy, her Breasts

* *Not always in either Case, but oftner when newly with Child.*

Breasts are flabby, soft and fallen; she will have no Milk in them, nor find her self quicken at the ordinary time, but only as it were a bubling of agitated Waters; she feeleth a greater Pain and Weight in her Belly, which is likewise more equally in its Circumference extended, than if there were a Child; the Lips of the Womb, her Thighs and Legs will be swell'd and œdematous; and a worse Colour in her Face than when with Child. Now as this Dropsy may come alone, so likewise it may often happen together with a true Conception, these Waters being then contained without the Membranes of the Child in the Cavity of the Womb; for tho' there may be much Water within these Membranes, it is not properly the Dropsy of the Womb, because there must ever * naturally be some, in the midst of which the *Fœtus* is contained: Notwithstanding, sometimes there is such a Quantity, which doth so prodigiously swell the Woman's Belly, that one would believe she had two or three Children, when she hath but only one, which is much weakened by it, because the greatest part of its Nourishment is † resolved into these Waters, whichalmost extinguishethand suffocates that little natural Heat which is there. Some Women have evacuated three or four Quarts above two Months before they were brought to Bed; when this happens, they are then contained in the || Womb without the Membranes; for else the Child would be necessitated to be born presently after these Evacuations*, if it were the Waters (naturally contained in the Membranes) that came away.

* *And always is.*

† *Rather the Waters hinder the Mother's Nourishment, and consequently of the* Fœtus.

|| Amnios & Chorion; *Yet not without a peculiar Membrane, otherwise they would have flowed as they came.*

* *That being the right time of Labour.*

The best Remedy for this kind of Dropsy, the Woman being with Child, is to wait with Patience

the Hour of her Delivery, observing the mean time a drying Dyet: But when it is only Water contained in the Womb, she must use Diureticks, causing the Womb to open and evacuate them; and her Courses must be endeavoured to be provoked, having always a Care to destroy, by convenient Purges, the Cause of the Generation of such Superfluities.

The Womb is sometimes so full of these Humours, that it discharges some on the outward Parts, and principally upon those which are near, as the Lips of the Privities, which often are thereby so swelled, that they become quite blown up; and sometimes in some Women are so big and swelled, that they cannot close their Thighs together for them, which hinders their walking, unless with Pain and great Inconvenience. This Swelling is then livid, and almost transparent, even as a *Hydrocele*; because of the Quantity of clear Water which filled it: And because it may be painful and inconvenient to the Woman during her Labour, by reason they straiten the Passages, it will be necessary to remedy it before; which, for the greater Certainty, must be done by the Operation of the Hand, making many Scarrifications with a small Incision-knife all along the Lips, whereby the Humours will sweat out and distil forth by little and little; after which Compresses, dipt in Aromatick and Astringent Wine, must be put upon it to prevent Relapses, by fortifying the Parts, causing the Patient to observe all the while a good Dyet fit for the Dropsy. Some would apply Leeches, to avoid the Pain of the Knife: But they are not so proper, because the small Orifices they make, as soon as they are taken off, immediately close again, which happens not so soon to the Scarrifications, made as big or little as one will, and may be kept open by Ointments applied to them, as long as may be thought fit or necessary. A Seton with good Success hath been applied.

CHAP.

CHAP. XXIII.

Of the Venereal Diſeaſe in Women with Child.

IT is not very hard to imagine, how a breeding-Woman that hath the *Pox* can communicate it to a Child in her Belly, becauſe this contagious Diſeaſe corrupting all the Maſs of the Mother's Blood, it is neceſſary the Infant, which hath then no other Suſtenance, ſhould be infected with it, converting this bad Blood into its own Subſtance, the Acrimony of which Blood eaſily cauſeth in an Infant's tender Body thoſe malignant Ulcers, which all Children, whoſe Mothers are contaminated with it, uſually bring with them at their Birth. It breaks not out ſometimes before the Child is 5, 6, 7, or 10 Months old.

The *Pox*, which in its Eſſence is of the ſame Species, and is only diſtinguiſhed by Degrees, according as it is greater or leſs, communicating it ſelf by the means of the Mother's Blood, will make more or leſs Impreſſion on the Infant's Body, according to its Strength or Weakneſs; and if the big-bellied Woman have Ulcers very near the Womb, as in the Neck and neighbouring Parts, by this Proximity the Venom will be very eaſily conveyed to it. [*No eaſier than if remote.*]

I do not deſign here to enquire into the Bottom of this Venereal Diſeaſe, nor to write particularly of the Cure of it: But intend only to ſhew whether Women may undergo the Cure whilſt with Child, or ought therefore to defer it till after they are brought to Bed. That this may be the better determined, we muſt make ſome Diſtinction: For, when the Woman is towards the End of her Account, it ought to be deferred till after ſhe is brought to Bed, when both ſhe and the Child, if infected, may be taken in Hand; becauſe the Labour coming on, when the Woman is in

the

the midſt of her Cure, ſhe may run the Hazard of her Life: And beſides, if the Child ſhould be then ſtill-born, one would be apt to think it was killed by the Violence of the Medicaments, and accuſe the Chirurgeon of Raſhneſs.

When the *Pox* is but in the firſt Degree, and hath cauſed no great Accidents, one ought then likewiſe to remit the eradicating Cure till after Child-bed, and be contented only with the Palliating by a convenient Dyet and gentle Purgers from time to time, to prevent the Evils encreaſing: But if the Woman, when young with Child, hath the *Pox* in the higheſt Degree, accompany'd with very great and continual Accidents, which threaten Danger, if her Cure be protracted till after Delivery; (becauſe in ſo long a time theſe Accidents augmenting more and more, it would be impoſſible but her Fruit ſhould be corrupted, and very hard if ſhe did not miſcarry:) That the greateſt of theſe two Evils be avoided, ſhe having Strength enough, ought to be taken in Hand: For, to imagine the worſt, that the Remedies make her miſcarry, it is no more than the greatneſs of the Diſeaſe would otherwiſe certainly do. Let her then be taken in Hand, without ſuffering the Accidents longer to augment, which by continuance render themſelves much more dangerous both to her and her Child, being careful to give her the gentleſt Remedies, and with more Preparation and Circumſpection, ſo that the Evacuation procured to her by Salivation, be rather by * little at a time, and the longer, than too great and ſudden; and above all, that it be rather by anointing the upper Parts only with † Mercurial Ointments, and not by Perfumes, which ſooner endanger miſcarrying, by opening the Womb; beſides, that they ſooner cauſe the Fruit to periſh if it had Life. For the ſame Reaſon alſo, no Mercurial Medicine muſt be taken in at the

* *Which Courſes ought to be obſerved in all Perſons.*

† *As* Unguentum Neapolitanum.

the Mouth: Wherefore Frictions of the upper Parts are to be preferred, endeavouring always, as much as may be, to be Masters of the Evacuation, and to hinder it from causing a Loosness; for that is more dangerous than Salivation, || because of the continual forcing downwards in going to Stool, by which the Womb receives great Commotion, and is extremely agitated.

|| *The Flux is not otherwise kind.*

I know very well that many will not easily be perswaded, but that either it is impossible to cure a Woman of the *Pox* whilst she is with Child, or that she and her Child cannot undergo the Remedies without inevitable Danger of Death: However, the Experience I have had of it my self, makes me to be of another Opinion, which I am willing to communicate for an Example in the like Case. In the Year 1660, when I practis'd Midwifery in the *Hostel de dieu* at *Paris*, a young Wench not above twenty Years old, came thither to lie-in of her second Child, that had had the *Pox* before ever she conceived the first time, and after miscarried of a dead Child, rotten with the *Pox*; therefore being big this second time, and perceiving the Accidents of her Disease to augment more and more, she concluded there was no Hopes this Great-Belly would succeed any better than the first, because she had all over her Body, especially upon both her Breasts, very many malignant Ulcers, which encreased daily; and fearing it might turn to a Cancer before her Reckoning was compleat, being but three Months gone, she resolved to submit to a thorough Cure then, and to hazard her Life in that Condition to save her Child's, having no other Hopes to effect it, nor being able her self to resist the growing Disease. She acquainted three or four Chirurgeons both with her Disease and Design, not at all concealing her Great-Belly; who for that Cause would not undertake her, (altho' she was fully resolved upon it, and promised

to

to pay them well) telling her that their Conscience would not suffer them to do it in the Condition she was in, and that it would be better she would patiently submit to it as well as she could, till she was brought to Bed, and then they would very willingly undertake her: But when she found none would undertake her, unless she concealed her Great-Belly, which was not hard to be done, being but 3 Months gone, and believing there was no better an Expedient: She met with another (to whom she mentioned nothing of her Great-Belly,) that put her into the ordinary Course, as if there had been no Conception; and, besides the common Remedies used in this Disease, he gave her a Salivation by five or six reiterated Frictions of the Ointment, which followed her very plentifully five whole Weeks, so that she was well and perfectly cured, without leaving the least ill Accident behind of her Disease. When she was almost recovered, and that all had succeeded well, she told her Chirurgeon she was 4 Months and a half gone with Child, (for she was 3 Months when she came to him, where she lodged six Weeks intire, without having it in the least perceived) which at first he could hardly believe, but perceiving her Belly rather grown bigger than lesser, during the Evacuation the Physick had made, he was immediately assured of the Truth of it: She informed him, that the Reason why she had concealed her Great-Belly, was, the Refusal four Chirurgeons (to whom she confest it) made to take her in Hand. From the time she was cured she suffered not the least Inconvenience during all the Remainder of her time, except a little Want, because all the Money she had was given the Chirurgeon for her Cure, which made her come to the *Hostel de Dieu* to lie in, where I delivered her of a Child at the full time, as big, fat and healthy, as if the Mother never had had the least Touch of that Disease in her whole Body; and which was very remarkable,

the

the * Burden (which is a part very susceptable of the least Impression of a Woman's corrupt Humours) was as neat, fair and ruddy as could be imagined.

* *We must take the Author's Word for it.*

This Example, which is very true, may convince us, that a big-bellied Woman may be taken in Hand for the *Pox*; and more safely, if the Precautions noted above be carefully observed: For it is without Contradiction, that if this Woman had not been cured, she had this second time been brought to Bed of a rotten Child, as before. Relating once this History to a Chirurgeon, a Friend of mine; he told me, that he himself twice, in two different Persons, had the same Success, who were very well cured, and their Children likewise well born at the full time, without having the least Impression of the Venom in any part of their Body. *Varandæus* confirms to us this Truth in the 2d Chapter of his 2d Book of Womens Diseases, where he precisely tells us, that he had seen big-bellied Women, who had had this Disease eradicated by Anointings with *Mercury*, and Salivation prescribed by Empericks; which may convince us that this Cure will easily have a better Success, when govern'd and manag'd by a knowing and experienced Person.

In a Word, 'tis easy to be perswaded that they can endure it, altho' with Child, because many very often have continual Fevers for 12 or 15 Days, and other acute Distempers, for which they have been necessitated to be 9 or † 10 times blooded, and yet notwithstanding have oft-times gone through with their Children to their full Account, and been delivered of them as well as if they never had had any ill Accident.

† *Such frequent bleeding Women with Child in so short a Space, is not always approved in* England.

CHAP.

CHAP. XXIV.

Of Abortion, and its Cauſes.

WHen a Woman caſts forth in the Beginning what ſhe had retained by Conception in the Womb, 'tis called an Effluxion, or a ſliding away of the Seeds, becauſe they have not yet acquir'd any ſolid Subſtance: If they miſcarry of a falſe Conception, which is ordinarily from the latter end of the firſt to the end of the ſecond Month, it is called an Expulſion; but when the Infant is already formed, and begins to live, if it comes before the time ordain'd and preſcrib'd by Nature, it is an Abortion: Which may happen from the ſecond to the beginning of the ſeventh Month, for afterwards it is accounted a Birth, becauſe the Infant being ſtrong enough, and having all its Perfections, may then live, which is impoſſible, if he comes before. Theſe things thus underſtood, we then ſay, that an Abortion is an iſſuing forth of the Child, yet imperfect, out of the Womb, contrary to Nature, before the term limited; which is the cauſe, that for the moſt part it is dead, or if ſometimes alive, it dies in a ſhort time after.

We may for the moſt part aſſert, that every acute Diſeaſe eaſily makes a Woman miſcarry; becauſe they deſtroy her Fruit, which being dead, never ſtays long in the Womb, and alſo puts the Woman in great hazard of her Life, as ſaith *Hippocrates* in the 30th Aphoriſm of his 5th Book, *Mulierem gravidam morbo quopiam acuto corripi, lethale.* The particular Cauſes of Abortion, are all the Accidents mentioned in the preceding Chapters, as violent and frequent Vomitings: Becauſe there is not only want of ſufficient Nouriſhment for Mother and Child, when the Food is ſo continually vomited up, but alſo great Reachings and Endeavours,

deavours, by which the Womb being often compreſſed, and as it were ſhaken, is at laſt conſtrained to diſcharge it ſelf before its time. Pains of the Reins, great Cholicks and Gripes may likewiſe cauſe the ſame Accident, as the Strangury alſo; for there are then made ſtrong Compreſſions of the Belly every moment to expel the Urine. Great Coughs by their frequent Agitation ſuddenly thruſting the *Diaphragma* with Force downwards, give alſo violent Shocks to the Womb. Great Looſneſſes endanger a Woman to miſcarry, according to the 34th Aphoriſm of the 5th Book; and ſooner if a *Teneſmus* follows, which is great Needings, whereby the right Gut ſeeks to expel the ſharp Humours that irritate and provoke it. This makes us take notice of the 27th of the 7th Book, *Mulieri utero gerenti, ſi tenſio ſupervenerit, facit abortum:* For in this Caſe the Womb, which is ſituated upon the *Rectum*, receives a great Commotion by its continual Needings. If a Woman's Courſes flow immoderately, it is impoſſible her Fruit can be in Health, as it is in the 60th Aphoriſm of the 5th Book: For beſides, that the Infant is not ſufficiently nouriſhed, the Womb alſo, by being too much moiſtened, is eaſily relaxed and opened. Letting Blood immoderately doth the ſame for the ſame reaſon, eſpecially if the Child be great, according to the 31ſt Chapter of the ſame Book.

But one of the worſt Accidents which cauſe Abortion, is that * Flooding, which proceeds from the Separation of the After-birth from the Womb, of which we treated in the 20th Chapter of this firſt Book.

* *Being very rarely cured.*

The Dropſy of the Womb hinders the Child from growing to Perfection, for the great abundance of Water extinguiſheth the natural Heat, which is already at that time much debilitated; and the Pox in the Mother infects the Child, and often kills it in her Belly,

ly, as we have demonſtrated in the preceding Chapter; and whatever very much agitates and ſhakes the big-belly'd Woman's Body, is ſubject to make her miſcarry; as great Labour, ſtrong Contorſions, or violent Motions, of what manner ſoever, in falling, leaping, dancing, and running or riding, going in a Coach or Waggon, crying aloud, or laughing heartily, or any Blow received on the Belly; becauſe that by ſuch Agitations and Commotions, the Ligaments of the Womb are relaxed, yea and ſometimes broken, as alſo the After-birth and Membranes of the *Fœtus* are looſened. A great Noiſe ſuddenly and unexpectedly heard, may make ſome Women miſcarry; as the Noiſe of a Cannon, and chiefly Thunder-claps; and yet more eaſily, if to this Noiſe be added the Fear they uſually have of ſuch Things, which happens rather to the Young than Elderly Women; * becauſe their Bodies being more tender and tranſpirable, the Air, which is ſtrongly forc'd by that Noiſe, being introduc'd into all her Pores, offers a great Violence by its Impulſion on the Womb, and on the Child within it; which the elder being more robuſt, thicker and cloſer, reſiſt with more Eaſe. Great Watchings, cauſing a Diſſipation of the Woman's Strength, and much Faſting, hinders the Infant from acquiring its Perfection; fetid and ſtinking Smells do much contribute to Abortion, and amongſt others the Smell of Charcoal; as appears by the Hiſtory recited in the 10th Chapter of this Book.

** Women troubled with Vapours, are they that ſuffer by Surprizes in ſuch a Nature.*

The Indiſpoſitions of the Womb produce the ſame Effect, as when it is callous, or ſo ſmall, or ſo much compreſſed by the *Epiploon*, that it cannot be extended, as it ought to be, ſufficient to contain the Child and Burden with Eaſe, together with the Waters, which may likewiſe happen, if the Woman be too ſtrait laced, or keeps in her Belly with ſtrong and ſtiff Busks, for

for to be well ſhap'd; or by this Subtilty to conceal a great Belly, as ſome do; frequent Copulation, eſpecially towards the End of her Reckoning, may effect the ſame thing, becauſe then the Womb being very full, bears much downwards, and its inward Orifice being very near, is ſubjected to Violence.

If a Woman miſcarries without any of theſe Accidents, and that one deſires to know the Cauſe of it, *Hippocrates* explains it in his 46th Aphoriſm of the 5th Book, where he ſaith, *Quæ vero mediocriter corpulentæ abortum faciunt ſecundo menſe, aut tertio, ſine occaſione manifeſta, iis acetabula uteri mucoris ſunt plena, nec præ ponderе fœtum continere poſſunt, ſed abrumpuntur:* Any Woman indifferently corpulent, that miſcarries the ſecond or third Month, without manifeſt or apparent Cauſe, it is, becauſe the * Cotylidons of the Womb (which are the inward Cloſures of its Veſſels) are full of viſcous Filth, by reaſon of which they cannot retain the Weight of the *Fœtus*, which is looſen'd from it. To this Accident phlegmatick Women are very ſubject, and thoſe who have the Whites exceedingly, which by their continual Affluence moiſten, and make the Womb within ſo ſlippery, that the After-burden cannot adhere to it, which alſo relaxeth it and its inward Orifice, that the leaſt Occaſion cauſeth Abortion.

* *I own none in Women.*

But if the Paſſions of the Body cauſe ſo much hurt to a big-belly'd Woman, thoſe of the Mind do no leſs, and eſpecially Choler, which agitates, inflames, diſperſes and troubles all the Spirits, and Maſs of Blood, by which the Child ſuffers extremely, becauſe of the Tenderneſs of its Body; but above all, ſudden Fear, and the Relation of bad News, are capable to make a Woman miſcarry at that Inſtant; (as it happen'd to the Mother of that Couſin of mine, whom I mention'd in the 10th Chapter of this firſt Book) which likewiſe the other Paſſions may cauſe, according as they are

more or less violent, but not so easily. There are yet other Causes of miscarrying, which may be said to proceed from the Infant, as when they are monstrous, because they do not then follow the Rule of Nature; as likewise when they have an unnatural Situation, which makes them torment themselves, because of their troublesome or uneasy Apartment, and they oblige the Womb to expel them, not being able to endure the Pains they cause, which it also does, when the *Fœtus* is so great that it cannot contain it to the full time, nor the Mother furnish it with sufficient Nourishment.

If we find one or more of the above specify'd Accidents, and that the Woman withal hath a great Heaviness in her Belly, so that it falls like a Ball on her side when she turns, and that there proceeds out of her Womb stinking and cadaverous Humours, it is a sign she will soon miscarry of a dead Child: Moreover her Breasts will confirm it, if having been hard and full in the Beginning, they become afterwards empty and flacced, as is specify'd in the 37th Aphorism of the 5th Book; and the 38th of the same Book, saith, *That if one of a big-belly'd Woman's Breasts, who hath two Children, begins to flag, it is a sign she will miscarry of the Child of that side; and of both, if both flag in the same manner.*

It is most certain, a Woman is in more Danger of her Life when she miscarries, than at her full Time; because (as we have said before) Abortion is wholly contrary to Nature, and very often accompany'd with Flooding; and in more Danger of miscarrying always, if she miscarries of the * First, and some apprehend then an Impossibility of ever having Children after, to which young marry'd People are very subject, because of the violent Emotion and Perturbation of the whole Body, excited by ardent and frequent Copulations; but notwithstanding, they may preserve their Fruit when their greater Vigour is over, and their Loves a little moderated.

* *A vulgar Error.*

We

We have taught in each of the foregoing Chapters, how to prevent all the Accidents before recited, any of which is sufficient to make her miscarry; and the easier, if many are complicated: Wherefore to avoid a troublesome and needless Repetition, you may have recourse to the Remedies there taught, by which both Women and Children may escape the Danger of Death.

They that are subject to Abortion, ought above all to take their Ease, and keep in Bed if they can, observing a good Diet, and refraining Copulation assoon as they believe themselves to be with Child; avoiding the Use of all Diureticks and Aperitives, which are very pernicious; as also violent Passions of the Mind, because they are very prejudicial. She ought likewise to be * loose in her Dress, that she may breathe the freer, and not strait-lac'd, and rack'd, as most of them are ordinarily with their Busks under their Clothes, to make their Bodies strait; and amongst other things, they had need take heed of slipping and falling in their walking, to which big-belly'd Women are very subject, because the Bigness of their Bellies hinders them from seeing their way: They will therefore do well to wear low-heel'd Shoes with large Soals, to prevent hurting themselves, as too many daily do. I admire in this Case the Superstition of many Midwives, and some Authors, who order a Woman with Child to take, assoon as she hath hurt her Belly with a Fall, some Crimson-Silk small minced in the Yolk of an Egg, or the Grains of † Scarlet, and Treddles of several Eggs put into the Yolk of one; as if that entring the Stomach, were able to fortify the Womb and the Child in it, and to keep it there, || for which there is no Appearance of Reason or Truth; But quiet Rest in-

* *That is according as they use themselves.*

† *Kermes.*

|| *How then do inward Medicines either prevent Miscarriage, or forward Travel.*

deed contributes much to it, which for this reaſon is uſually directed for 9 Days; altho' ſuch a one hath need of 15 Days, or more, for her Hurt or Indiſpoſitions; and to others 5 or 6 is ſufficient; during which time may be apply'd hot to the Belly, Compreſſes ſteeped in Aromatick and Aſtringent Wine. But becauſe there are many Women ſo infatuated with this ſuperſtitious Cuſtom, that they would not believe themſelves out of Danger, if they took not that Crimſon-Silk, or the * Treddles of the Eggs (which is a pure Conceit) one may give it to thoſe that deſire it, to content them, becauſe theſe Remedies, tho' uſeleſs, can yet do no hurt. It is now time to make an end of this firſt Book, in which I have only mentioned the moſt ordinary Diſtempers, which have ſome particular Indications in their Cure, during the Woman's being with Child; of which I have not treated very exactly, becauſe it may be ſuppos'd, that one may elſewhere have a more perfect Knowledge of them, with all their Circumſtances: Let us now paſs to the ſecond Book, to treat of Deliveries, not only the Natural, but likewiſe all that are contrary to Nature, it being the principal Motive that induced me to write, and to teach as well as I can, the beſt and moſt methodical Deportment in it.

* *As for the Treddles, I believe there is little Virtue in them.*

The End of the Firſt Book.

BOOK

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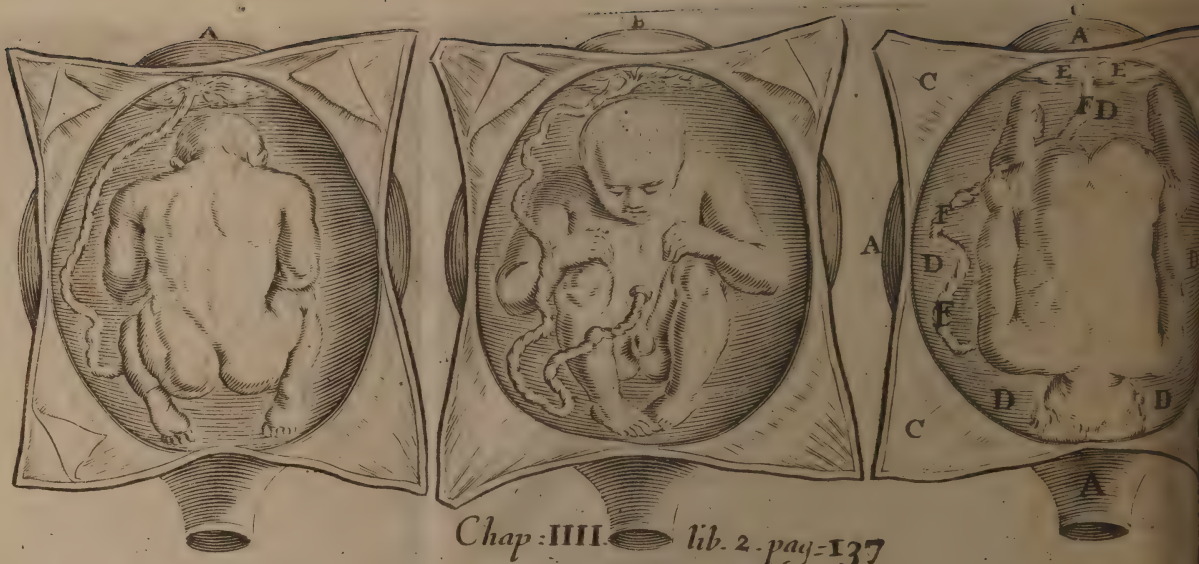

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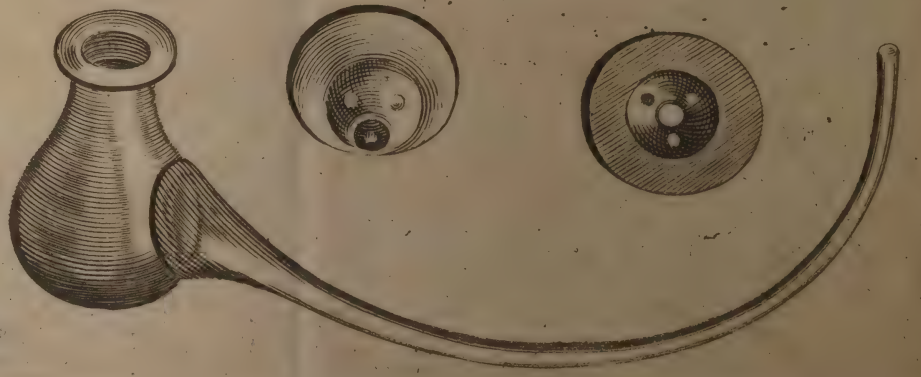

BOOK II.

Of Labours Natural, and Unnatural; with the way how to help Women in the First, and the right means of remedying the rest.

AS it is very unprofitable to those that embark on the Sea for a long Voyage, (as for Example, to the *Indies*, or the like) if after having by their Prudence escaped all the Dangers incident to so long a Voyage, they are shipwrack'd in the Haven: So likewise it is not sufficient, that a great belly'd Woman should be preserv'd from all the Diseases mentioned in the preceding Book, for Nine whole Months, if at the end of that time she be not well delivered of it by a happy Labour. This therefore shall be the whole Subject of this second Book, where we will treat as well of the natural as unnatural Labours, and teach the manner of aiding and comforting Women in the first, and the means to regulate all the rest.

CHAP. I.

What Labour is, and the Differences of it, together with its different Terms.

BY a Delivery we understand either an Emission or Extraction of the Infant, at the full time, out of the Womb. This Definition may comprehend as well the Natural, which is accomplished by Emission, when the Infant coming in a commodious and usual Figure, the Womb sends it forth without extraordinary Violence; as the Delivery contrary to Nature,

which we are often engaged in, extracting it by manual Operation.

Every time the Womb lets pass, or sends forth whatsoever it had retained and formed after Conception, must not be call'd a Labour; for, observing what I have already noted above, and what I will here again repeat, that it may be more plain, If a Woman voids by the Womb what is contained in the Beginning after she had conceived, it is properly called an Effluxion or Slip: Because at that time, there is nothing formed or figured, neither have the Seeds yet any firm Consistence, * which is the Cause why it slips away so easily with the least opening of the Womb, as often happens between the first conceiving and the seventh and eighth Day only; after which, until the End of the second Month, the Woman sometimes lets slip false Conceptions, which turn to Moles, if they continue any longer in the Womb; which is then called an Expulsion: And if after the Third Month, or thereabouts, the time when the *Fœtus* is wholly formed and animated, it is sent forth before the seventh, in that case it is an Abortion, which is always the Cause, either that the Infant comes dead into the World, or dies soon after. But we properly call Labour, or Delivery, every issuing forth of an Infant, which happens after the End of the seventh Month to all the remaining part of the time afterwards; because there is then a sufficient Perfection, as also Strength enough, to come into the World, † and live in it afterwards.

* *There is nothing lies in the Womb after Coition, or can be found in so many Days, as our Author mentions, but in those Tubes in the Bottom of the Womb called* Tubæ Fallopianæ, *which convey the irrogating* Aura *of the Seed to the Eggs in the Testicles.*

† *Which is very seldom seen.*

As to the general Differences of Labour, we must take notice, that the one is legitimate or natural, the other illegitimate or against Nature. To come to the

the Knowledge of each, we ſay, that four Conditions muſt abſolutely be found in a Delivery, that it may deſerve to be called legitimate or natural: 1*ſt*, That it be at full time; 2*dly*, That it be ſpeedy, without any conſiderable Accident; 3*dly*, That the Child be living; and 4*thly*, That he comes right in a good Poſture or Situation: For if any of theſe Four are wanting, the Delivery is againſt Nature; and the more, by how much there are more of them wanting.

As to the due time of Labour, moſt Authors aſſert that Nature hath appointed to all other Animals a certain limited time of going with young, and bringing them forth: But that Women only, by a particular Favour of the ſame Nature, have none prefix'd, neither for conceiving, going with Child, nor bringing forth. And as to Conception, 'tis moſt certain, that a Woman can conceive at any time, Night or Day, Summer or Winter, or any other Seaſon whatſoever; becauſe ſhe can copulate when ſhe pleaſeth, which few other Animals can, who couple but at certain Seaſons when they become luſtful: But as to the time they are accuſtomed to go with young, it is no more preciſely determined to them, than to a Woman; for as ſhe may be brought to Bed either in the 7*th*, 8*th*, 9*th*, 10*th*, yea, and ſometimes the * 11*th* Month (which happens very rarely) but for the moſt part in the 9*th* Month. So likewiſe for Example, tho' the ordinary time for a Bitch to puppy is the 4*th* Month, or thereabouts, ſo ſome puppy ſooner and ſome later: And Ewes which yean their Lambs at the End of five Months, advance or recede from that ordinary Term, according to the Ground where they feed, and the Quality of their Paſture, to which contributes many particular Diſpoſitions of each of theſe Animals; which likewiſe happens to all others, as well as to Women. We may perceive the ſame alſo in † Fruit, for the Seaſons and

* *I account it a Miſtake in the Woman's Reckoning.*

† *Here is very little Analogy.*

different Climates always more or leſs aſſiſt their ſpeedy Maturity, which depends likewiſe very much on good Husbandry. The firſt time that a Child may live, when born, is the 7th Month complete, and it may better from that till the End of the 9th Month, but as ſoon as that time is paſs'd, the Stay it makes after in the Womb, is no ways beneficial to it, becauſe it hath then acquired all neceſſary Perfection and Strength ſufficient to reſiſt all outward Injuries. The Child born before the 7th Month cannot live long, as we ſaid before, becauſe of its Weakneſs: But he that is born in the 8th Month may very well live, yea, and more likely than if born in the 7th Month (which is contrary to the Opinion of all the World;) becauſe it is more perfect, as I ſhall demonſtrate afterwards in the fifth Chapter of this ſecond Book, where I will particularly ſhew the Cauſe of this Error.

Now as we ſometimes ſee Children born at the ſeven Months end, do live notwithſtanding; ſo there are ſome Women not brought to Bed till towards the 10th Month, and ſometimes not till the Beginning of the 11th: Altho' this may happen in ſome, yet there are many who deceive themſelves in their Reckoning, believing that they are gone but 7 or 8 Months, and ſometimes 10, or more, when they are but juſt 9; that which thus abuſeth them, is their imagining themſelves with Child preciſely from the ſuppreſſing of their Courſes, tho' it be not always true; becauſe ſome have wanted their Courſes 2 Months before they became with Child; and others have them on the contrary, * 2 or 3 Months after, in the uſual manner: Which daily happens according to their different Conſtitutions and Temperaments, more or leſs ſanguine.

* *Some longer.*

If (as we have ſaid) the entire and perfect Term be neceſſary to the legitimate and natural Birth; a good Figure and Situation of the Child is no leſs, which ought

ought to come with the Head first, in a strait Line, having the Face turned downwards, that is, towards the Mother's Back, the Arms couched along its Sides, and the Thighs stretch'd upwards. This Figure is much the better and convenient, because after the Head († which is the biggest part of the Child) is passed, all the rest comes forth easily, and that being so, none of the Joints of its Body can be turned to hinder its Passage forth: But any other part that may first present it self to the Labour, makes it unfortunate, and against Nature, in which Case there is often great Danger to Mother or Child, and sometimes to both, if not suddenly and duly helped.

† *Our Author might have excepted the Shoulders.*

They who have no perfect Knowledge of the Parts of a Woman's Body, acquired by Anatomy, are contented to admire, and cannot (as they say) conceive how it is possible, that an Infant so big, can pass in time of Labour through the *Vagina* of the Womb so small; at which *Galen* and many other Authors have much admired; many of whom are of Opinion, that the Woman's *Os pubis* is separated to enlarge the Passage at that time, without which it would be impossible for the Infant to have room enough to be born, and therefore Women a little antiquated, suffer more in their first Labours than others, because their *Os pubis* cannot be so easily separated, which often kills their Children in the Passage. Others are of the Opinion, that it is the *Os ilium* which is disjointed from the *Os sacrum* to the same purpose; and say, both the one and the other of them, that these Bones thus separated at the Hour of Labour, are thereto by Degrees a little before disposed by the slimy Humours which flow forth from about the Womb; and then mollify the Cartilage, which at other times join them firmly. But these two Opinions are as far from Truth as Reason; for Anatomy convinceth us clearly, that the Womb by no means toucheth these Places, or

doth

doth mollify them by its Humours; as also, that these Bones are so joined by the Cartilage, that it is very difficult to separate them with a Knife, especially the *Ilium* from the *Sacrum*, and almost impossible in some elderly Women, without great Violence, altho' *Ambrose Parrè* (citing many Witnesses then present at the thing) reports the * History of a Woman, in whom (having been hanged 14 Days after she was brought to Bed) he found, as he saith, the *Os pubis* separated in the Middle the Breadth of half a Finger, and the *Ossa ilia* themselves disjointed from the *Os sacrum*. I will not in this Case accuse him of Imposture, for I have too much Respect for him, and esteem him too sincere for it; but I indeed believe that he was mistaken in this Separation; for there is no likelihood, that being so at the time of her Labour, it would remain so a Fortnight after the breadth of half a Finger; for then they should have been obliged to carry this Woman to Execution; for she would not have been able to have supported her self to climb the Ladder of the Gibbet, and to keep her self on her Legs, according to the Custom of other Malefactors; because the Body is only supported by the Stability of these Bones: Wherefore we must rather believe, as most probable, that such a Disjunction and Separation was caused either by the falling of this Woman's Corps from the high Gibbet to the Ground after Execution; or rather by some impetuous Blow on that Place, received from some hard or solid thing. If we examine well the different Figure and Structure of these Bones, between a Man and a Woman's Skeleton, we shall find a larger empty space and distance between these Bones; much more considerable in Women than Men, and that to this purpose the least Women have the Bones of the *Ischion* more distant the one from the other, than the biggest Man: They have all likewise the *Os sacrum* more outwards, and the *Pubis* flatter, which makes the

* *Which could in no wise proceed from Labour.*

the Paſſage from this Capacity larger, and more able to give way to the Child at the time of the Labour; they have beſides this, the Bones *Ilia* much more turn'd outward, that the Womb being impregnated, may have more room to be extended on the ſides, and be more at eaſe ſupported by ſuch a Diſpoſition as is here repreſented.

Theſe two Figures of Bones repreſent the Bones that form the whole Capacity of the *Hypogaſtrium.*

A *ſhews the Man's Bones.* B *the Woman's, for to know the Difference, that the Woman's is more capacious and ſpacious than the Man's, for* C & C, D & D, E & E, *are at a larger diſtance one from the other, in the Woman's than they are in the Man's; and beſides, that Women have the* Coccyx, *marked* F, *more turned outwards than the Men, which gives way to the Infant's Head to paſs without great Difficulty through the large Paſſage there is between the two Bones of the* Iſchion, *marked* E & E, *without any Neceſſity for the Separation of the* Os pubis, *as ſome have imagined contrary to Truth.*

The Bladder and *Rectum* being emptied of the Excrements they contain, do in no wiſe hinder the Womb, on purpoſe made *membranous*, from dilating it ſelf as it doth, to let the Infant paſs in Labour, by this great empty ſpace ſufficient for it, without any Neceſſity that theſe Bones ſhould be disjointed or ſeparated; for if it ſhould ſo happen, Women could not keep themſelves on their Legs, as many of them do, immediately after they are brought to Bed, becauſe it is inſtead of a Support to them, as is already ſaid, and of a middle juncture to all the reſt, as well of the upper as nether Parts of the Body. I noted that very well in the *Hoſtel de Dieu* of *Paris*, in the many Women I have layed there. When Women, that are there to be brought to Bed, begin to be in Labour,

they

they go into a little Room called the *Stove*, where all are delivered upon a little low Bed made for that purpose, where they put them before the Fire; afterwards, as soon as it is over, they conduct them to their Bed, which sometimes is a good way off from this little Chamber, whither they walk very well; which they could never do, if their *Os pubis*, or those of the *Ilia*, were separated the one from the other: Besides, we often see Maids that conceal their Labour, put themselves (the better to hide their Faults) immediately to their ordinary Business, as if they ailed nothing: And in all that I have delivered, I could never perceive this imagined Disjunction, putting my Hand on the *Pubis* when the Child was in the Passage; but I have indeed found the *Coccyx*, which is joined with a loose Joint to the Inferior Extremity of the *Os sacrum*, to bend outwards during Labour, in which part the Women feel sometimes much pain, because the coming forth of the Child offers great Violence to it, and because its Head then doth much press the *Rectum* against it.

Moreover, having often seen and dissected Women dead a few Days after Delivery, I found it very difficult to separate these Bones with a strong sharp Penknife, where I could never find the least Appearance of any preceding Separation: And if ancient Women have more Pain with the first Children than the younger, it doth not proceed from the Difficulty of the Separation of these Bones (which never is for the Reasons above) but because the Membranes of their Womb are dry, hard, and callous; and particularly its internal * Orifice, which therefore cannot so easily be dilated as young Womens, being more moist.

* *Rather its* Vagina.

Having sufficiently explained what is Delivery, and all its Differences, we must now examine what Signs usually precede, and what accompany a natural Delivery, and an unnatural, which shall be the Subject of the next Chapter.

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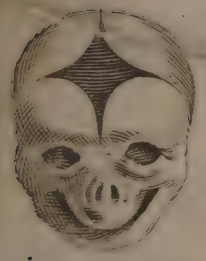

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CHAP. II.

The Signs that precede and accompany, as well a natural as an unnatural Delivery.

WHEN Women with Child, chiefly of their first, perceive any extraordinary Pains in their Belly, they immediately send for their Midwife, taking it for their Labour; who when she is come, ought to be well informed of the Matter, and careful not to put her in Labour before there is a Disposition to it; for many times both Mother and Child lose their * Lives, when it is excited before the due time. Those Pains which may be called false, are usually caused by a Cholick proceeding from Wind, which come and go, griping the whole Belly, without any forcing downwards or into the Womb, as those do which preceed or accompany Labour: And this Cholick is dissipated by warm Clothes apply'd to the Belly, and a Clyster or two, by which true Labour-pains are rather furthered than hindered. A Woman may feel other kind of Pains coming from an Emotion caused by the Flux of the Belly, which are easily known by the frequent Stools that follow.

* *By breaking the* Amnios *and* Chorion.

The Signs preceding a natural Labour few Days before, are, that the Belly which before lay high, sinks down, and hinders a Woman at that time from walking as easy as she used; and there flows from the Womb slimy Humours, appointed by Nature to moisten and smooth the Passage, that its inward Orifice may the more easily be dilated when it is necessary; which beginning to open a little at that time, suffers that Slime to flow away, which proceeds † from the Humours that strain through the thin Substance

† *Why may it not rather proceed from the Glandules, called* Prostatæ.

of

of the Infants Membranes, and acquires a viſcous Conſiſtence by the Heat of the Place.

The Signs accompanying preſent Labour, (*that is, ſhewing, that the Woman is effectively in Labour*) are, great Pains about the Region of the Reins and Loins, which coming and reiterating by Intervals, anſwer in the Bottom of the Belly with congruous Throws: *The Face red and inflamed, becauſe the Blood is much heated by the continual Endeavours a Woman makes to bring forth her Child; as alſo, becauſe that during theſe ſtrong Throws her Reſpiration is ever intercepted, for which Reaſon much Blood hath recourſe to the Face: Her privy Parts are ſwell'd, becauſe the Infant's Head (lying in the Birth) often thruſts and cauſeth the neighbouring Parts to diſtend outwards, which thence appear ſwelled in this manner: She is often ſubject to † Vomiting, which makes many believe, who know not the cauſe of it, that the Women to whom it happens, are in Danger: but on the contrary, it is ordinarily a ſign of ſpeedy Delivery, becauſe the good Pains are then excited and redoubled every Moment, until the Buſineſs be finiſhed. This Vomiting comes from a Sympathy between the Womb and Stomach, by reaſon of the Ramifications of the Nerves of the ſixth Pair of the Brain, which are diſtributed to both the one and the other, and by which it communicates the Pain it feels at that time, ariſing from the Agitation the violent and frequent Motions the Child cauſeth, and the ſtrong Compreſſion the Muſcles of the lower Belly makes during the Throws, for to help the iſſuing forth of the Child: Beſides, when the Birth is very near, Women are troubled with an || univerſal trembling, and principally of the Legs and Thighs; not with cold, as at the beginning of an Ague-fit, but with the Heat of the

* *Not always.*

† *Commonly the beſt Labour.*

|| *Not always.*

the whole Body; and the Humours, which then flow from the Womb, are often discoloured with Blood, which with the Signs above-mentioned, is an infallible Mark of the nearness of the Birth, 'tis that the Midwives usually call *Shows*; and if one then puts up their Finger into the Neck of the Womb, they will find the inner Orifice dilated, at the opening of which the Membranes of the Infant, containing the Waters, present themselves, and are strongly forced downwards with every Pain the Woman hath; at which time one may perceive them to resist, and again press towards the Finger, being by so much the more or less hard and extended, by how much the Pains are stronger or weaker. These Membranes with the Waters in them, when gathered (that is, when they are advanced before the Head of the Child, which makes the Midwives call it, *The gathering of the Waters*) presenting themselves at this inward Orifice, do then resemble very well to the Touch of the Finger, the abortive Eggs which have yet no Shell, but are only covered with a simple Membrane: After this the Pains redoubling continually, the Membranes are broken by the strong Impulsion of the Waters, which incontinently flow away, and then the Head of the Child is easily felt naked, and presented at the opening of the inward * Orifice of the Womb: Now all these, or the greatest part of them met together at what time soever of a Woman's going with Child it be, whether full time or no, one may be assured, she will soon be delivered; but great Care must be taken not to hasten her *Labour*, before the necessity of it be known by these Signs; for that would but torment the Woman and Child in vain, and put them both in danger of their Lives, as that Midwife did, whom I found endeavouring to put the above-named *Martha Rolet* in Labour at six Months end, because of some Pains she had in her Belly and Reins, without any other Accident

* *The Neck.*

cident answering them downwards; which History is at large in the sixth Chapter of the first Book, to shew that in some Cases we must make no more haste than good speed.

Labour contrary to Nature, is when the Child comes in an ill Figure and Situation; as when it presents any otherwise than the Head first, as also when the Waters flow away a long time before it is born, because it remains dry in the Womb, and they are absolutely necessary to moisten the Passage, and render it more slippery. When the After-burthen comes first, it is an Accident which renders the Labour always dangerous, by reason of the great Flux of Blood usually following, of which the Mother may die in few Hours, and the Infant (because it receives no more Nourishment) is quickly smothered in the Womb, for want of Respiration, which it then needs, if it stay never so little after. The Labour is also grievous, when accompanied with a Fever, or any other considerable Distemper, which may destroy the Child in the Womb, as also when Pains are small, and come slow with long Intervals, and little Profit, by reason of which a Woman is extreamly tired: But the Difficulty most frequent and ordinary comes from the Infant's wrong Posture. We shall speak more particularly of the Signs of all these different Deliveries, in treating of them severally hereafter: And now come to the Enquiry of some Particulars, without which it is impossible to assist a Woman safely in her natural Labour, or to help her in the unnatural ones: And therefore we will examine every thing that is in the Womb with the Infant during Pregnancy, and first describe those that first offer themselves to pass the Orifice, when the Woman is near her Delivery, which are the Membranes of the Infant, and the Waters contained in them.

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Fig. 1

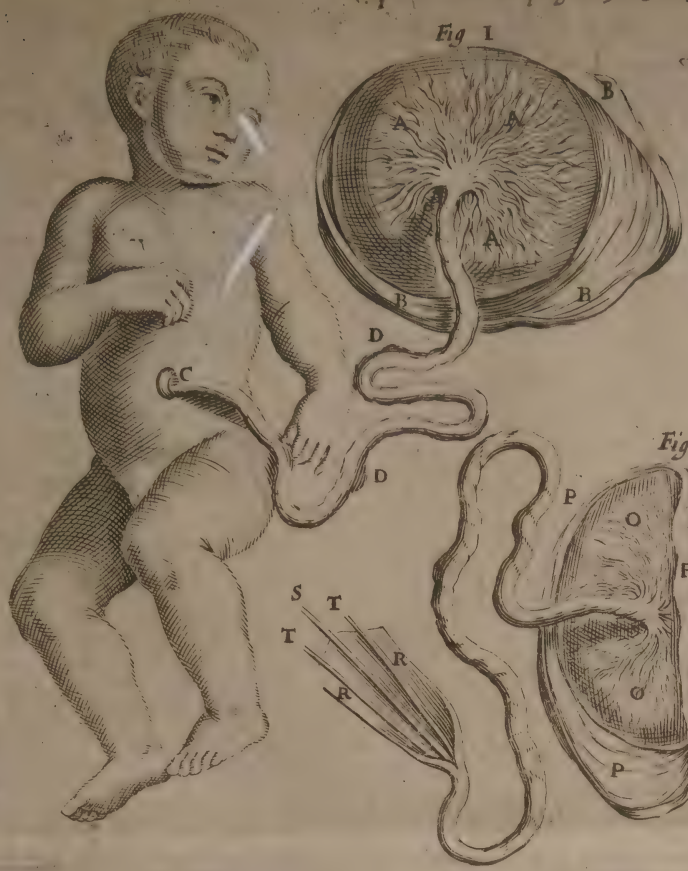
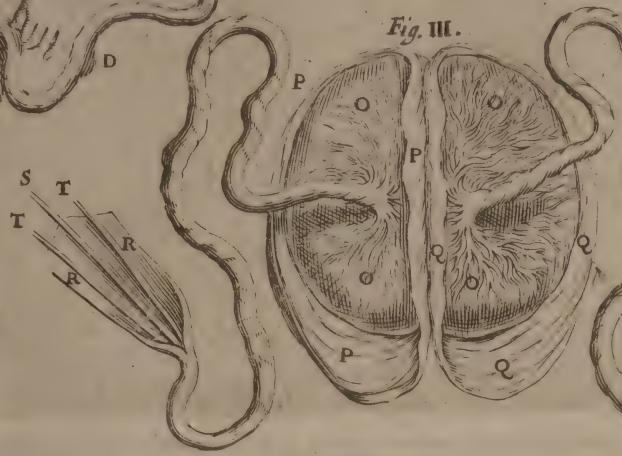
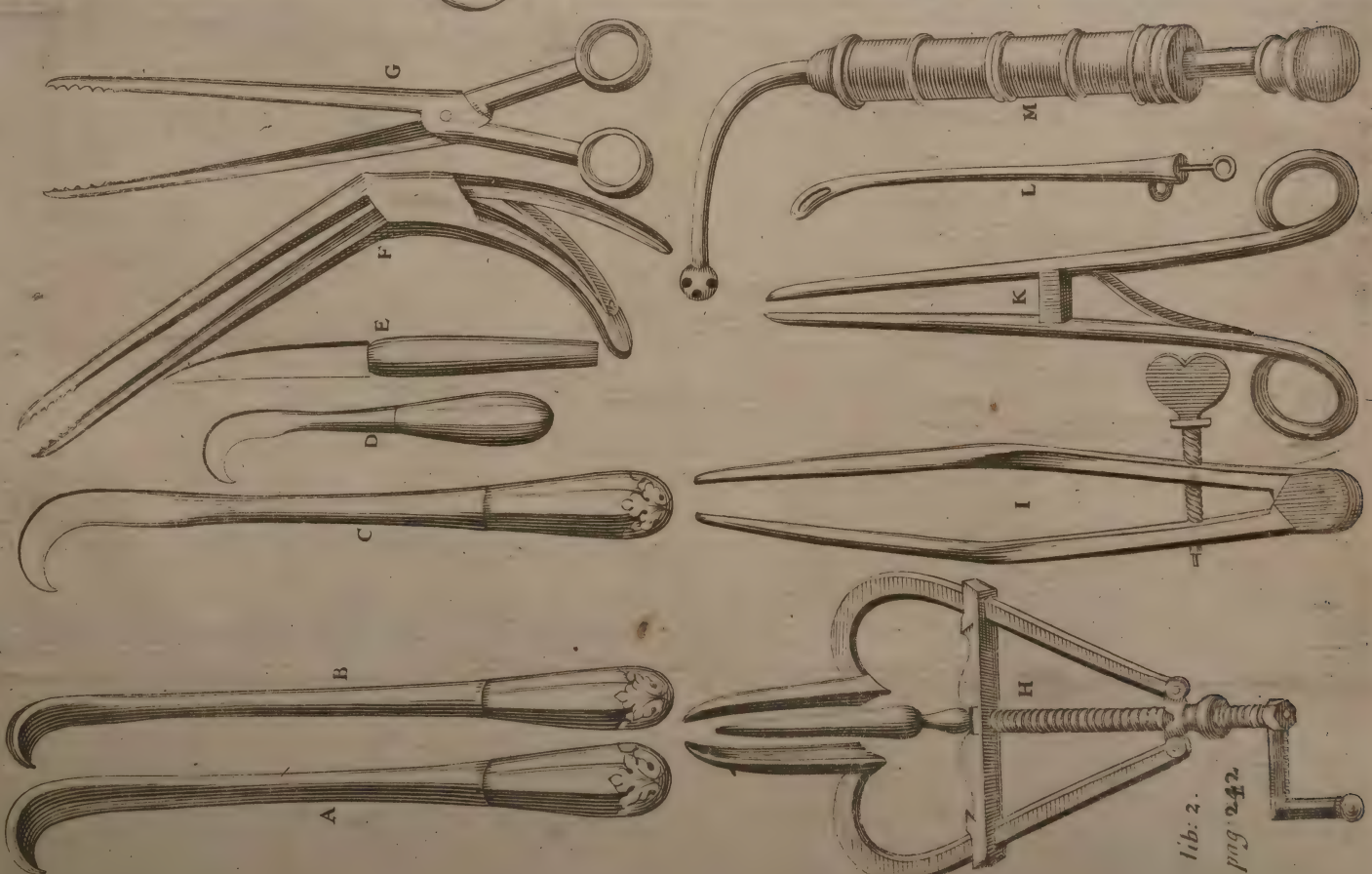


Fig. II.

Fig. III.





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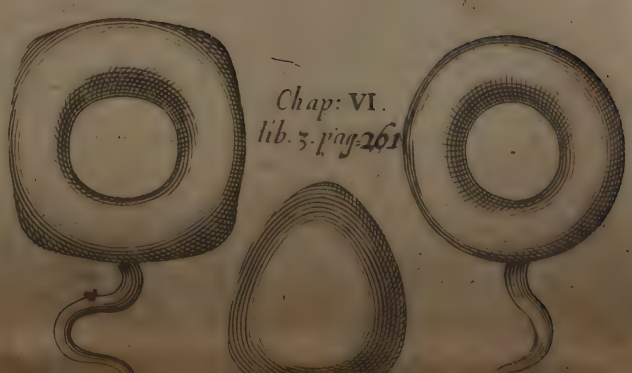


This Figure represents the Membranes of the Infant, wholly separated from the Womb, in which it is contained with the Waters. These Membranes in some manner resemble a great Bladder, through which the Figure of the Infant may be a little perceived: There is likewise seen on the upper part, the After-Burthen, marked A, *on that side which is fastned to the Bottom of the Womb.*

CHAP. III.

Of the Membranes of the Infant, and the Waters.

AS soon as the two Seeds have been confusedly mixed and retained by Conception, the Womb immediately after, by means of its Heat, separates this Chaos, for to make out of it the Delineation and Formation of all the Parts, and begins to work upon these * Seeds, which tho' to sight they appear similar and uniform, yet in effect contain in them many dissimilar Parts; all which it separates and distinguisheth one from the other, inclosing the most noble, and on the † outside the most glutenous and viscous, of which first the Membranes are formed to hinder the Spirits, wherewith the spumous Seed abounds, from being then dissipated, and to serve afterwards to contain the Infant and the Waters; in the midst of which it swims, that they may not stream away.

* Vid. *pag.* 118.

† *Covering.*

As the Membranes of the *Fœtus* are the first Parts formed, so are they with the Waters the first that in time of Labour present themselves to the Passage before the Infants Head. Most Authors are so dark in the Descriptions they make of these Membranes, that it is very hard to conceive them as they are, by the Explication they make of them. They do not so much as agree in the Number of them, some account Three as well for a Child as a Beast, to wit, the

Chorion, the *Amnios*, and the *Allantoides*; others account but two, because there is no *Allantoides* in a human *Fœtus*; but to speak properly (if it be strictly examined) what there is, (as I have often done) there will be never found but || two, which are so joined and contiguous the one to the other, that it may be said to be but a double one, which may indeed be separated and divided into two. I will explain it on such wise, as may be best understood by those that are ignorant of it: For there are many, who think with *Galen*, that these Membranes are separated and distant the one from the other, and that the one surrounds only the Infant, and the other receives the Waters, which are partly engendred from Sweat, and partly from the * Urine, (as they imagine;) and believe further, that these Waters themselves are separated the one from the other by these Membranes, which is quite contrary: For they are both so joined the one to the other, that they two compose as it were but the same Body and Membrane, which serves (as we have already said) to contain the Infant with the Waters, which are all of a Nature, and shut up in the same Membranes, as I shall make appear hereafter in speaking of their Original: It matters not to the Truth, after what manner this be explained, provided it may be understood as it is.

|| *We must allow the* Allantois *in a human* Fœtus *to contain the Urine.*

* *I do not believe that Urine is any one Ingredient.*

The exterior Part of this Membrane, or double † Involver; or, if it be esteemed two, the first Membrane presented without, is called *Chorion*, from the *Greek* Word χορεῖν, signifying to contain, because it immediately contains and invirons the other, which is called *Amnios*, that is a little || Lamb, because it is so small and thin. *Galen* in his 15th Book of the use

† *Covering.*

|| *Or rather from* Amiculum; *quasi, it friendly covers the* Fœtus.

uſe of Parts, calls the Burden *Chorion*. But to render this more intelligible, we ſhall take this firſt Membrane for the *Chorion*, which may be again ſeparated and divided into two, tho' † effectively it be but one. The *Chorion* is a little rough and unequal throughout the whole outſide of it, in which many ſmall capillary Veſſels may be obſerved, running quite round, as alſo many little Fibres, by which it cleaves to every ſide of the Womb: But it is a little more ſmooth within, where it joins every where, and unites with the *Amnios*, in ſuch a manner as that it appears (as we have already declared) but as one and the ſame Membrane. This *Chorion* covers the *Placenta*, and cleaves cloſe to the forepart of it, which reſpects the Infant, by means of the interlacings of an Infinity of Veſſels: It is alſo principally faſtned to the Womb by the whole Circumference of the *Placenta*, in which part this Membrane is a little thicker.

† *Yet really two.*

The *Amnios*, which is the ſecond Membrane, is three times ‖ thinner than the *Chorion*: And is very ſmooth within, but not juſt ſo much where 'tis joined and united to the *Chorion*. This Membrane is ſo thin, that it is quite tranſparent; * and hath no Veſſels in it, which makes it ſo thin, as cannot be imagined without ſeeing. This *Amnios* doth in no † wiſe touch the *Placenta*, tho' it covers it, but it lines only all the inner part of the *Chorion*, which is between, and from which it may be wholly ſeparated, if it be done with care.

‖ *'Tis whiter and thinner.*

* *It hath Veſſels in it, receiving them from the Umbelick Vein and Arteries.*

† *The* Chorion *toucheth it not, the* Amnios *being between.*

The better to conceive this as it is, and after what manner theſe Membranes are in the Womb, conſider the Compoſition of a Foot-Ball, imagining the Leather which covers it, to be the Womb of a pregnant Woman, and the Bladder blown up with Wind with-

in the Foot-Ball, to be this double Membrane of the *Chorion* and *Amnios*, in which are contained the Child and the Waters together; and even as the outside of this Bladder toucheth every where (because it is blown up) the Leather of the Foot-Ball: So likewise the Membranes of the *Fœtus* are joined on all sides to the Womb, except where the Burden cleaves to it, in which place it passeth above it.

As to the 3d (or rather pretended) Membrane, which Authors name *Allantoide*, and say it is like a † Sausage or Girdle, which surrounds and clothes the Infant from the Cartilage || *Zephoide*, reaching only below the Flanks, it is most * certain, there never was any such thing in any of these Animals, whose Dams have but one young at a time, no more than Women, as Sheep, Cows, † Mares, She-Asses, nor any other for ought I could ever learn after many curious Inquiries.

† *It hath no such Form, Office or Origin.*

|| Cartilago Ensiformis.

* Vid. *pag.* 130.

† Vid. Clarissimus D. *Needham*, de formatu fœtus, cap. 9. *Authority sufficient for the contrary Opinion, if my own be doubted.*

Sometimes Infants at their Birth bring forth these || Membranes upon their Head, and then 'tis said they will be fortunate: Which is meerly superstitious, because it happens by the Strength of their Substance, so that they cannot burst by the Impulse of the Waters, or the Womens Throws in Labour; or because the Passage being very large, and the Infant very little, it passeth very easy without Violence: In Truth in this respect they may be said to be fortunate, for having been born so easily; and the Mother also for being so speedily delivered; for in difficult Labours, Children are never born with such Caps, because being tormented and pressed in the Passage, these Membranes are broken and remain still there.

|| *I am of Opinion that those Films upon many Childrens Heads newly born, are essentially different from any of the two Membranes: Being thinner than the* Amnios, *if possible, fitting only the Head of the Infant.*

Within

Within the Infant's Membranes (disposed as I have explicated) are contained the Waters, in the midst whereof he swims, and is situated; the Original of which seems very uncertain, if the different Opinions of Authors upon this Subject be regarded. Some will have them to be the Urine emptied out of the Bladder by the * *Ouraque*, because they cannot find a true and easy way for it; and because their Colour and Flavour much resembles the Urine contain'd in the Bladder: But it is very certain, it cannot be so as they say, because the † *Urachus* is not perforated in the *Fœtus*, and it comes not forth of the Navel; for the Place where it is fastned is always tendinous, and very like a small Lute-string, through which, it is most certain, nothing can pass, how subtil soever; as I have often observed, and seen Mr. *Gayant* observe, who is, by universal Approbation, the most exact and expert Anatomist that hath been this long time in *Paris*; for whose Merit, his Majesty hath conferred that Honour of choosing him before all others, to make those curious Inquiries and many fair Experiments, in which several choice and knowing Persons are continually employ'd, who are of the Royal Academy. Now this natural Conformation doth clearly manifest that *Laurentius* was abused, when he saith, that he had seen a Man, whose *Ouraque* was not closed, to void a Quantity of Water by the Navel; inferring thence, that it came from the Bladder by this *Urachus*; and that which is contained within the Infant's Membranes, is collected after the same manner. I doubt not but he saw a Man void Water by the Navel, as he saith; but it did certainly proceed from the Capacity of the lower Belly, where he had a Dropsy, and not from the Bladder; for there is no Cavity in the *Urachus*, as we have said, at least none (except it be against the Order of Nature) upon which, in this Case, we must

* Urachus.

† *No* Urachus *in a human* Fœtus.

ſo rely, as to affirm it ought to be ſo in all other Subjects.

There are others, who will alſo have theſe *Waters* to be the Urine: But they are of an Opinion, that it paſſeth through the Yard, whoſe Paſſage is always open; and not by the *Urachus*, which never is hollow.

For my part, as it appears to me, with more Reaſon, and as indeed it is, theſe Waters are only generated out of vaporous Humidities, which tranſude and exhale continually out of the Infant's Body, and meeting theſe Membranes, through which they cannot paſs, becauſe they are too thick and cloſe, are turned into Water, which is thus by little and little collected, as well during the firſt Months of Conception, the Child not yet quick, as all the remaining part of the time after it is: For Vapours paſs forth and exhale out of all porous Bodies that are hot and moiſt, as is that of an *Embryo*. The Argument is very weak, by which they maintain theſe Waters to proceed from the Urine, becauſe the Waters are ſalt, as the Urine is; now Sweat, Tears, and other Humours, which diſtil and tranſude out of the Body, are as well ſalt as the Urine, of which the Infant, whilſt it is in the Womb, cannot have much more than Ordeur in the Guts, becauſe at ſuch time it receives no Nouriſhment by the Mouth, and that all its ſuperfluous Humours may eaſily paſs away by Tranſpiration, through the Subſtance of all the Parts of its Body, which is very tender: Wherefore I cannot conceive any Neceſſity to oblige them more to empty the Urine, which is in a ſmall Quantity in the Bladder, than the Excrements which are in the Guts; which is not then done in any manner, but only after the Child is born. *Bartholinus*, and others, would however have the Infant to void Urine through its Yard, and that theſe Waters proceed from thence: But there is a greater Probability it ſhould come by Tranſpiration, as I have ſaid; for before it is yet fully ſhaped, and quick, there is notwithſtanding found

a

a proportionable Quantity of these Waters to the Bigness of his Body; which makes it manifest, that it is neither the Urine rendred by the *Urachus*, nor the Yard, as all the World imagine: And that which proves it more plainly, is the Example of some Children born with their * Yards not perforated, who notwithstanding have these Waters whilst they are in their Mother's Womb.

* *An irrefragable Argument.*

It must be observed, that when there is more than one Child, they are never in the same Membrane, unless their Bodies are joined and adhere together (which is rare and monstrous when it happens) but each of them have their Membranes and Waters apart and separate, in which they are each wrapt up by themselves.

These Waters, thus collected within these Membranes, have divers very considerable Uses. They serve the Infant to move it self the more easily, as it were by swimming from one side to the other, and that it may not hurt the Womb by its frequent Motions against it, which would cause great Pain, and often excite to Abortion, were it dry: They serve also very much to facilitate its Passage in the Birth, making the way very slippery, and by that means the Orifice of the Womb being moistened, is better widened, and yielding when they break † just when the Child is ready to follow, or a little before: For else remaining dry, it is born with greater Difficulty, and the Mother also more tormented by it.

† *Right time of good Labour.*

John Claudius de la Corveé, Physician to the late Queen of *Poland*, in his Book, entituled, *De Nutritione Fœtus*, would have these Waters to serve the Infant chiefly for Nourishment, and that it sucks them by his Mouth, and swallows them (as he imagines) whilst he continues in the Womb: But the Truth of the contrary being known to the least Scholar, it would be but

Labour in vain to refute all the Reasons he brings to prove and support his Saying; for they destroy themselves, and do all of them correspond to the Falshood of their Principle*.

* *I am of Opinion, that some of those Waters do pass into the* Fœtus, *and that by the Mouth; for the very same have been found in the Ventricle of the Child dissected for that very end.*

Having thus sufficiently explained the Membranes and Waters of the *Fœtus*, we must in order enquire after the Parts, by means of which it is nourished whilst in the Womb, which shall be our following Discourse.

These three Figures represent the *Placenta*, or After-birth, and the Umbilical Vessels of the Infant.

The first shews the Shape of the Burden, to the midst of which is fastned the Navel-string, and round it may be discerned the † Membranes of the Infant, which remain thus wrinkled when the Child is come forth of it.

† *Skins.*

A A A *Shews the Body or Cake of the Burden.* B B B *the Skins fastned round about it.* C C C *the Navel-string, which contains the Infant's Umbilical Vessels, and proceeding from his Navel, are inserted in the* ‖ *midst of the Burden, where they produce an Infinity of Branches.* D D *certain Eminencies, called Knots, found on the String, proceeding from the Dilatation of the Umbilical Vessels more in one place than in the other.*

‖ Rather on one side.

The second shews the Burdens turned on the outside, and the Child's Belly open'd, that the Distribution of the Umbilical Vessels may be then considered.

E E E *shows the Burden on that side which cleaves to the Womb: On this side there appears no Vessels, as there doth on the other; but only some simple Interlinings and small Outlets, by which the Blood that transudes the Womb, may distil into this Parenchyma.* F F F *the Membranes, Skin or Skirt.* H *a Portion of the* Amnios *separated from the* Chorion, *marked* I. G *a part of the* Chorion *separated from*

from the Amnios, *marked* H. I I I *the Navel-string, in which are many Knots.* K *the Navel where the Vessels enter.* L *the Umbilical Vein, which enters into the Fissure of the Liver.* M *the two Umbilical Arteries, which being conducted along the side of the Bladder, are inserted into the Iliack Arteries, and sometimes into the* Hypogastricks. N *the* Uracus, *which from the Bottom of the Bladder, couching between the two Umbilical Arteries, is fastned in the Navel, without passing forth, in which place it is not hollow in the least, and is extremely small.*

The 3d shews the burden of Twins, where each Child hath his several Navel-string and Membranes a-part.

O O O O *The fleshy Substance or Body of the Burden, common to both Children.* P P P *the Skirt or Membranes which wrap up the Child on this side a-part.* Q Q Q *the other Membranes which contains the other Child a-part.*

As to the Strings, which are double to this After-Burden, that on the right is dissected at the End, to shew that there are but three Vessels only in it.

R R *Shews a strong Membrane, in which these three Umbilical Vessels are inclosed.* S *the Vein which is very big.* T T *the two Arteries much less than the Vein.*

The other String cut on the other end, where are only seen the Orifices of the Vessels.

CHAP. IV.

Of the Placenta, *and Umbilical Vessels of the Child.*

SInce the Infant is only nourished with the *Mother's Blood whilst it is in the Womb, and that big-bellied Women † never have any that is fair or good; provident Nature hath formed the *Placenta* to serve it for a Magazine, that it may always have sufficient, and be there again elaborated and perfected, to render

* Vid. *pag.* 135. *to which I may add, that in the* Duodenum, *we have found the same as in the Ventricle, only beginning to turn green by reason of Choler.*

† *Very often.*

it

it more convenient for its Nouriſhment; for without doubt, ſo groſs a Blood as the Mother's cannot poſſibly be converted into its delicate Subſtance, if it were not firſt purified in the *Placenta*, which is afterwards ſent to it by means of the *Umbilical* Vein, and brought back, as we ſhall ſhew hereafter, by the Arteries, which are the Conduits of which the Navel-ſtring is compoſed. We ſay that the *Placenta* is nothing but a ſpongy and fleſhy Maſs, ſomewhat like the Subſtance of the Spleen, and as it were woven and interlaced with an Infinity of Veins and Arteries, which compoſe the greateſt Part of its Body, made to receive the Mother's Blood, appointed for the Infant's Nouriſhment, which is in the Womb. This Maſs of ſpongious Fleſh is thus called, becauſe it reſembles in Figure a Cake; ſome call it the *Delivery*, becauſe being come forth after the Child is born, the Woman is quite delivered of the Burthen of her Great-Belly: It is likewiſe called the *After-burthen*, becauſe it is as a ſecond Labour, of which the Woman is not diſcharged till † after the Child is born: There are ſome which give it the Name of the *Uterine* Liver, becauſe they ſay it ſerves as a Liver to prepare the Blood appointed for the Infant's Nouriſhment: And *Laurentius* likes rather to call it the || *Pancreas* of the Womb, and appoints the ſame uſe for it, as for the *Pancreas* of the lower Belly, to wit, * for a Reſt and Support to the Veſſels of the Navel, which diſperſeth an infinite Number of Branches throughout all its Subſtance.

† *Sometimes in flooding it comes before the Child.*

|| *Sweet-bread.*

* *And ſo it doth as well as prepare the* Galaxy *for the* Fœtus.

† *There is no* Placenta *till the* Fœtus *be almoſt formed.*

† This *Placenta* is made of the menſtruous Blood of the Mother, which flows into the Womb, by the Accumulation of which is formed this *Parenchimatous* Maſs; the Shape of it is flat and round, of about the bigneſs of

of a Trencher, and two Fingers breadth thick towards the Middle of it, where the *Umbilical* Veſſels are faſtned: But it is thinner towards the Edges of all its whole Circumference. It is covered with the *Chorion* and *Amnios* on the ſide next the Infant, and on the other ſide it is joined and faſtned to the Bottom on the Inſide of the Womb: It is ſtrongeſt faſtned to the Womb (with its Circumference) by means of the *Chorion*, as we have hinted already in the preceding Chapter, which cleaves ſo cloſe to it, by the Interlacings of an Infinity of Veſſels, which appear very large in its Surface, that it cannot be ſeparated from it without Laceration of its Subſtance.

If one conſiders diligently, as I have done, the *Placenta* on that ſide which joins to the Mother, they may perceive that it is alſo indued with a kind of light *Membrane*, which is ſo frail and ſmall, that it is almoſt imperceptible: however, it may manifeſtly be diſcerned by wiping away the Blood with which it is always coloured.

There may be again obſerved, that all the Superficies on this ſide is as it were much interlined, not unlike in ſome meaſure thoſe of an Ox's Reins: And there appears likewiſe many ſmall Out-lets, by which the Blood, that tranſudes through the porous Subſtance of the Womb, diſtils into this fleſhy Maſs.

* Altho' there be two Children in the Womb, nay three, if Twins, that is to ſay, begotten in the ſame Act, they have uſually but one common *After-burthen:* Which hath as many Navel-ſtrings faſtned to it, as there are Children; which notwithſtanding are ſeparated one from the other by their ſeveral *Membranes*, in each of which the Children are a-part with their Waters; if at leaſt (as ſaid in the precedent Chapters) their Bodies be not joined and adhering one to the other; in which Caſe the Twins of this kind have as

* *'Tis common for two or three Children to have ſo many diſtinct Burthens; ſo many* Chorions, *ſo many Burthens.*

as well their Waters in common, as that they are involved in the same *Membranes:* But if they be Superfetations, there will be as many Burthens as Children: And as Superfetation (if there are as many as may possibly be) happeneth but very rarely, so there are few Women that have their Burthens separated, when they are delivered of several Children.

We scarce find any Creature but a Woman, that hath an After-burthen, like what we have described, and dischargeth it as useless, as soon as the Child is born; for most other Animals cast forth nothing after their Young, except the Waters only and some Slime, with the *Membranes* which surround them; and instead of this fleshy Mass, those, which ordinarily, as a Woman, bring forth but one Young at a time, have only some † *Cotyledons*, which are many spongious Kernels, joined inwardly to the proper Substance of their Womb, where terminates all the Branches of the *Umbilical* Vessels of their Young; which Kernels, as I have often observed in the dissecting of Sheep, are not bigger than Hemp-seed, when they are not with Young; but when with Young, they swell extremely, and become of the bigness of a Man's Thumb, the one bigger, the other lesser: They then resemble much the Figure of a round Mushroom, not yet spread, on the wrong side, after it be cut from its Stalk; and to each of those *Cotyledons*, or Kernels, are fastned the *Ramifications* of the *Umbilical* Vessels: However it is certain, that the Animals which have ordinarily more than one at a time; as Bitches, Rabbits, and others, have no *Cotyledons*, instead of which each Young hath in its *Cellule* a kind of particular *Placenta*, which the Dam eats as soon as she voids it, after she hath gnawed and cut off with her Teeth the *Umbilical* Vessel which held it.

† *Proper to meer Animals only.*

When a big-bellied Woman hath the least Indisposition of her whole Habit, there is almost ever some

Mark

Mark and Impreſſion, either in Colour or Subſtance on the After-burthen, which ſhe voids in her Labour; becauſe it being of a very ſoft Subſtance, eaſily imbibes the ill Humours of the Body, which uſed to be voided by the Womb. Its natural Colour ought to be red, and ſo much the fairer and better coloured, as the Woman is in good Health; its Subſtance muſt be whole, and equally ſoft, without the leaſt *ſchirrous* Hardneſs.

From the midſt of the Burthen proceeds a String, compos'd of many Veſſels joined together, which ſerve to conduct the Blood appointed for the Infant's Nutriment; the Number of them is diſputed amongſt Authors; ſome reckon four, that is, two Veins and two Arteries; others five, adding the *Ourachus* to them; but it is very certain, that there are but three only in a human *Fœtus*, as I have found by many Diſſections; to wit, one Vein and two Arteries; the Vein having ſent forth into the *Placenta* an Infinity of Branches, like to the Roots of a Tree, is conducted by a ſingle Channel all along the String to the Infant's Navel, which it paſſeth, to be at laſt terminated in the midſt of the * *Fiſſure*, which is in the inferior part of the Liver; and the two Arteries taking their Riſe out of the ſame *Placenta*, from a great Number of the like Roots, paſs along the ſame String by two Conduits, piercing alſo the Infant's Navel, and end in its *Iliack* Arteries, and ſometimes in the *Hypogaſtricks*. The Vein is much bigger than the Arteries; its Cavity is capable to admit a writing Quill into it, and thoſe of the Arteries only a ſmall Bodkin, about half the Bigneſs of the Vein. [*As I do remember I once ſaw three Arteries and one Vein in the Navel-ſtring of a Twin.*]

* *The* Lobe.

Theſe three Veſſels compoſing the String, are wrap'd up in one *Membrane* thick and ſtrong enough, proceeding from the *Chorion*, which likewiſe is clothed about with a Production from the *Amnios*, and may eaſily be ſeparated: But beſides that this firſt ſerves 'em as

as a Sheath, in which they are all three lodged, it separates them again one from the other by its Duplications; when the Veſſels of the String are full of Blood, it is then uſually about the Bigneſs of a Finger, and ordinarily of the length of a good half Ell, and ſometimes of two thirds, or three quarters. It is neceſſary it ſhould be of this length, that the Infant may have Liberty to move it ſelf in the Womb, and to go forth of it at its Birth, without tearing the After-burthen, to which it is fix'd. There are many Nodes or Inequalities, like unto Knots, which only proceed from the Dilatation of the Veſſels, which being *varicoſe*, and fuller of Blood in one Place than another, cauſeth theſe Eminences. Some Midwives believe ſuperſtitiouſly, or would make others believe, that the Number of theſe pretended Knots anſwers the Number of Children the Woman ſhall have afterwards, which is without Reaſon; becauſe Women delivered at forty Years of Age, and of their laſt Child, as we find by daily Experience, have as many Knots on the Navel-ſtring, as a Woman of 20 Years, who may yet have a Dozen Children*: They ſay further, That if the firſt Knot be red, the next Child the Woman ſhall have, will be a Boy; if white, a Girl: But this Propoſition is as ill grounded as the other; for theſe Knots appear only red, or to ſpeak more properly, of a dark blew, according as the Veſſels are more or leſs full of Blood, and eſpecially the Vein which gives it that Colour, and is ſo much the more apparent, as it is ſuperficial in that place.

* *A Lady of my Acquaintance being delivered of her firſt Child, had not one Knot on her Navel-ſtring; the Midwife told her, that therefore ſhe would engage it would be the laſt, as well as the firſt: But the next Year ſhe had Twins.*

There are many Authors admit, as we have ſaid, the *Ouraobus* into the Number of theſe *Umbilical* Veſſels, ſaying, that it ſerves to empty the Child's Urine into its *Membranes*: However, Experience ſhews us it

is

is no Veſſel, and that it paſſeth not forth of the Navel; but that it is only a *Ligament* in a Child, as it is in a Man, which coming from the Bottom of the Bladder, terminates at the Navel, without traverſing it, as they have hitherto miſtaken it. I have opened and diſſected above Thirty *Fœtus*'s, in none of which did I ever find it hollow, but always very ſolid and tendinous, towards the Place where it is faſtned to the Navel; and very like, as I have already ſaid, to a ſmall Lute-ſtring: Notwithſtanding I ever found it manifeſtly hollow in an Ewe, which was terminated with their other *Umbilical* Veſſels, at their *Cotyledons*; In which Animals are alſo two *Umbilical* Veins to be ſeen, going both near one the other to the Liver, which makes that their Navel-ſtring conſiſts of five Veſſels: but it is not the ſame in a human *Fœtus*, for there is but one only *Umbilical* Vein, and two Arteries. [*Vide pag.* 140.]

To underſtand well how the Nouriſhment is conveyed to the Infant by the *Umbilical* Veſſels, it is very neceſſary to conceive, and know in what manner the Blood circulates; which is thus, The Blood having been convey'd by the Mother's Arteries, which end at the Bottom of the Womb in the *Placenta*, which is there faſtned, makes a natural Tranſfuſion through the *Umbilical* Vein into the Child's Liver, after which it is carried into the *Vena cava*, and thence to the Heart, whence it is ſent to all the Parts by means of the Arteries; and very near a like Portion in Quantity, being in the *Iliac* Arteries, is conducted into the *Umbilicals*, which are there terminated, for to be carried back into the *Placenta*, where this Blood being again elaborated, returns to make the ſame Journey by the *Umbilical* Vein, paſſing again to the Child's Liver, and thence to the Heart, and ſo always ſucceſſively, without the leaſt Intermiſſion. But to be able to conceive eaſily how the Blood circulates in the *Placenta*, and how by the Help of that part is made a mutual

Tranſ-

Transfusion from the one to the other, as well in respect of the Mother, as of the Child; we need but imagine it to be a common Part, and depending on both their Bodies: For as to the Mother, the Circulation is there made just as in her Arm, or any other part of her whatsoever; and as to the Child, it is even the same. [*The* Placenta *participates of the Nourishment brought to the Womb by the Arteries, tho' not by any apparent* Anastomasis.]

There are no *Valvules* found in the *Umbilical* Vein, tho' I have curiously examined it, nor are any necessary: These *Valvules* are very frequent in the Veins of the Arms and Legs *; because these Parts are obliged to make different Motions, which compressing the Vessels, would trouble those of the Blood, if it were not so sustained and hindred from returning; but if the *Umbilical* Vein hath no need of any, because the Navel-string is loose and floating in the midst of the Waters, where it cannot be compress; and therefore the Motion of the Blood cannot be there intercepted, as sometimes in the Arms or Legs, or Parts where there are strong Contractions.

* *Oftner in the* Tubæ Fallopianæ.

As soon as the Child is born, these Vessels, which are bigger in a *Fætus* than they are in a Man, dry up by reason of their Cavity; and that part of them which is without the Belly, falls off, and is separated close to the Navel five or six Days after: For which Reason they lose their first use, and begin afterwards to degenerate into suspending Ligaments, to wit, the Vein into that of the Liver, and the two Arteries serve to extend and sustain the Bladder by the Sides where they are join'd to it, the Bottom of which is yet suspended by the *Ourachus*, which comes not through the Navel, as hath been said, but remains so pendant all the rest of its Life. We have hitherto made mention of all those things which are found with the Child in the Womb, let us now show what are the different Situations

tions of it in the Womb, according to the different times of Pregnancy: It is a thing of very great Consequence, and therefore deserves some serious Considerations.

The Three following Figures represent the different natural Situation of the Child in the Womb.

That which is marked B, *shews how it is situated the seven first Months of Pregnancy. That which is marked* A, *shews the same Situation on the back-side. And the third, marked* C, *shews in what fashion it is situated towards the End of a Woman's Reckoning, and at the time it is disposed to be born.*

Explication of all the Wombs, in which are contained all the Children represented in different Postures, as well in this Place, as in all the following.

A A A A *shews the Substance of the Womb.* B *the Membrane called* Chorion, *which lines the Womb within.* C C C C *the Membrane* Amnios, *which is so united and joined to the* Chorion, *that both of them seem to be but one single Membrane.* D D D D *shews all the Space which is filled with Waters, in the midst of which the Infant flotes, and is situated.* E E *the After-birth fastned to the Bottom of the Womb.* F F F *the Navel-string, which fluctuates hither and thither in the Waters.*

CHAP. V.

Of the several natural Situations of an Infant in the Mother's Womb, according to the different times of Pregnancy.

WHEN we shall have explained the several natural Situations of an Infant, those contrary to Nature causing for the most part all ill Labours, will easily be conceived.

It may be considered, that generally the Infants, as well Male as Female, are usually situated in the midst of the Womb; for tho' sometimes a Woman's great

Belly is a little higher on the one side than the other, yet that is, because the Globe of the Womb enclines more that way, and this Situation on the side must be understood only in respect of the Mother's Belly, and not of her Womb, in the midst of which it is always placed; because there is but one only Cavity in a Woman's Womb, marked with a small Line in its Length, without having two or more Separations; as is seen in those of other Animals.

There are some who would have these two imaginary Cavities to be the Cause why Women sometimes bear Twins, yea, and sometimes more; and that the Males rather lie on the right, and Females on the left side; which is *Hippocrates*'s Opinion in the 48th Aphorism of his 5th Book, where he saith, *Fœtus Maris dextrâ uteri parte, Fœmina sinistrâ magis gestantur*, but without any certain reason for it; because some Women have the Males on the left-side, others the Females on the right; and when there are Twins, sometimes both are of the same Sex, sometimes not, and indifferently situated on the right or left. This is all can be said in general of the Situation of Children in the Womb.

But in particular, when we consider the several Figures it makes, it differs according to the different times of Pregnancy; for when the Woman is young with Child, the little *Fœtus*, called *Embryo*, is always found of a round Figure, a little oblong, having the *Spine* moderately turned inwards, the Thighs folded and a little raised, to which the Legs are so joined, that the Heels touch the Buttocks; the Arms are bending, and the Hands placed upon the Knees, towards which the Head is enclining forwards, so that the Chin toucheth the Breast. It resembles, in this Posture, very well, one sitting to void his Excrements, and stooping down his Head to see what comes from him. The *Spine* of its Back is at that time placed towards the Mother's, the Head uppermost, the Face forwards, and the Feet downwards, and proportionable to

to its Growth and Grandeur, it extends by little and little its Members, which were exactly folded in the first Months. It keeps usually this Posture till the 7th or 8th Month, at which time the Head being grown very big, is carry'd downwards by its Weight, towards the inward Orifice of the Womb, tumbling as it were over its Head, so that then the Feet are uppermost, and the Face towards the Mother's great Gut *. Some believe, that only Males are so turned downwards when they are born, and that the Females are with their Face upwards; but both the one and the other are always turned downwards, with their Face towards the *Rectum* of their Mother, as is aboveſaid; and when it happens otherwise, it is unnatural; for the Child's Face coming upwards, will be extremely bruised, and the Nose wholly flatted, because of the † Bones Hardness in the Passage.

* *Many* Fœtus's *never turn before the time of Labour.*

† Os pubis.

It may be noted, that when the Child hath thus changed its first Situation, being not yet accustomed to this last, it stirs and torments it self so much sometimes, that the Woman, by reason of the Pains she feels, is apt to believe her Labour is at hand: And if this Circumstance be well considered, we may find it to be that first pretended Endeavour which Authors imagine the Child makes to be born in the 7th Month, and not being able to accomplish it, remains so till the 9th, and that reiterating it in the 8th, if it be born, it lives not long, because it was not able to endure two such puissant Endeavours so near together. But it is a meer Abuse, for if the Child turns it self so with the Head downwards, or rather is turned, it is but by a natural Disposition of the Weight of the upper Parts of the Body ‖; and if it stirs much at that time, and soon after, it is not from a desire to be born, but from the Inconvenience it receives from this new Posture, to which it was not before ac-

‖ *Rather by a natural Properſity, than any weight of its Head.*

accuſtomed, as already hath been mentioned: And it begins to turn thus ſometimes from the 7th Month, rarely before, but by Accident, ofteneſt about the 8th Month, and ſometimes in the 9th only, and at other times alſo it doth not turn at all, as we may eaſily perceive in thoſe that come in their firſt Situation, that is, with their Feet foremoſt. From whence it is eaſy to conjecture, and I hold it for a certain Truth, that the Children are the more ſtrong and robuſt, and conſequently may the more likely live, by how much the nearer they approach to the more natural and perfect time, which is at the End of the 9th Month.

The Infant then is turned on this manner with his Head downwards towards the latter End of the Reckoning, to the end only that he may be the better diſpoſed for its eaſier Paſſage into the World at the time of Labour, which is not then far off: For in this Poſture all its Joints are eaſily extended in coming forth, and the Arms and Legs cannot hinder its Birth; becauſe they cannot be bended againſt the inward Orifice of the Womb; and the reſt of the Body, which is very ſupple, paſſeth very eaſily, after the Head, which is hard and big, being once quite born.

When there are many Children, they ought, if the Labour be natural, to come in the ſame Figure, as when there is but one: But uſually by their different Motions they do ſo incommode one the other, that moſt commonly one of them preſents wrong at the time of Labour, yea, and before; which is the cauſe that one comes often with the Head, the other with the Feet, or in any other worſe Poſture, and ſometimes both come wrong.

However the Infant may be ſituated in the Mother's Belly, or in whatſoever Faſhion it be that it preſents at the Birth, if it be not according to the Poſture above deſcribed, it is always againſt Nature; and the natural Situation is ſo neceſſary to a good and legitimate Delivery, that thoſe which are againſt Nature, do cauſe for the moſt part bad Labours.

When

When a big-belly'd Woman is happily arrived near her Haven, she ought then to take great Care, she suffers not shipwrack there; which she will avoid, if she observes exactly, at the End of her Reckoning, the Rules which follow.

CHAP. VI.

What a Woman ought to do when she hath gone her full time.

I Am not of the Opinion of most Midwives, who advise Women with Child (that they may, as they say, have the better Labour) to use more than ordinary Exercise towards the End of their Reckoning, as *Liebant* also directs, who orders them to ride in Coaches, or trotting Horses, which is a very dangerous Advice, and causeth daily many wrong Births; for as we said in the precedent Chapter, 'tis about that time ordinarily the Child turns its Head downwards, and its Heels upwards, to be born right, and the poor Women often believing they may procure an easy Labour, make it by this extraordinary Exercise very unhappy, which because of the Agitation and Commotion of the Body, causeth the Child to take a wrong Posture, or makes the Womb so to bear down, and be engaged in the Cavity of the *Hypogastrium*, that afterwards it hath not at due time Liberty to be turned; which is often the Reason why it comes in its first Posture, that is, with the Feet first; besides that Labour (which ought to be Nature's Work, if the Child come right) is thereby excited before the full time, and tho' it were but four or five Days, it hinders not, as I have said elsewhere, from being as prejudicial to them, as we see it is to the Taste, Goodness, and Conservation of Fruit gathered but few Days before its perfect Maturity.

Wherfore I counsel a Woman (tho' almost contrary to the unreasonable Opinion of every one) to keep her self more quiet than ordinary, when she draws near her

time, that so her Child may be able to turn it self directly right, and that she by all means avoid strait lacing, that so it may have more space to be turn'd into a fit Posture to be born; she must then likewise observe a good Diet of Meat, of good juicy and easy Digestion, rather boiled than roasted, to moisten the better, and keep the Body thereby open, rather than by Clysters, which may hasten Labour; she may about eight or ten Days before Labour anoint her Privities with Goose, Capon, or Hogs Grease, or fresh Butter *; or foment those parts with Fomentations, which may be mollifying and loosening, and so render those Passages more smooth and slippery. This ought principally to be done by those that go with their first Child; because their Passages are more strait than others who have had Children already: But they who are a little in Years, have much more Pain, and are † longer in Labour of their first Child than others who are indifferently young; because the Membranes of their Womb are harder and dryer; wherefore they cannot yield so well, nor the inward Orifice be so easily dilated.

* *Her Belly likewise with Oil of Water-Lillies.*

† *Commonly.*

Some Authors commend bathing, the better to relax those Parts; but it is dangerous, lest by their too much Moistness, and the Emotion they cause to the whole Body, they make her come a little before her time. Many Women bleed by way of Prevention, when they are, or believe themselves to be at their full Time; which Custom I cannot approve of, if it be only for Prevention; but I do, in case some other Necessity require it, provided they abstain from it after the 7th Month ‖; because the stirring of the Child, caused by bleeding, is sometimes so vehement, that the Womb is constrained to open before its time, to be rid of the Child. If a Women with Child observes these Rules, she will have reason to hope for a good Issue of her Labour; In the mean time let her provide her

‖ *Without Danger afterwards.*

her self of a good Midwife, or an expert and handy * Chirurgeon to attend upon her as soon as she perceives the least Pain or Throw, of what kind soever; for as a small Wind, or Shake, will serve turn to make ripe Fruit fall, so the least Cholick, or any other false Pain, may bring forward her Labour, and surprize her unprovided of Help. Let us now see what is necessary when she is effectively in Labour.

* *Chirurgeons only practise in* France, *as noted before.*

CHAP. VII.

What is to be done when the Woman first falls in Labour.

A Woman's Travail is only many Pains with reiterated Throws, by which she endeavours to bring forth her Child: It is so called, because both Mother and Child suffer and take much Pains in this Action. Most People believe that there is no other Reason for the Cause of this Evil, but because God hath so ordained it, and that Woman, according to his Word, must bring forth with Pain, because of her Sin, according to what is written in the third Chapter of *Genesis*, *I will greatly multiply thy Sorrow, and thy Conception; in Sorrow thou shalt bring forth Children, and thy Desire shall be to thy Husband.* This Curse was indeed very great, because it hath extended to all Women that have brought forth Children since that time, and will continue to all that shall come hereafter. However, we find that all Females of meer Animals suffer as much, and are in as great Danger of their Lives as a Woman, when they bear their Young. This perswades us, that, besides this precise Will of God, in respect of a Woman, there must be yet a natural Reason, why it should not be otherwise; to wit, That it is impossible the Womb, being very strait, in comparison of the Child's Bigness, and very sensible, because of its *Membranous* Composition, should receive a necessary Dila-

tation for the Child's Birth, and such great Violence, without suffering considerable Pains for it. Now since a Woman for this Cause cannot expect to shun these Pains, she must endeavour to endure them with Patience, in the hope of being suddenly deliver'd from them by a fortunate Labour.

As soon as it is known that the Woman is certainly in Labour, by the Signs mentioned in the second Chapter of this Book, where both those preceding, and those accompanying Labour are recited; of which the principal are, Pains and strong Throws in the Belly, forcing downwards towards the Womb, and Dilatation of the inward Orifice, perceived by touching it with the Finger; as also the gathering of the Waters, which come before the Head of the Child, and thrusting down the Membranes which contain them, through which, between the Pains, one may in some manner with the Finger discover the Part which presents, especially if it be the Head of the Child, by its Roundness and Hardness: Then must all things necessary to comfort the Woman in her Labour be got ready; and the better to help her, care must be taken that she be not strait-laced; a pretty strong Clyster may be given her, or more than one, if there be occasion; which must be done at the beginning, and before the Child be too forwards, for afterwards it is very difficult for her to receive them, because the Gut is too much compressed: They serve to excite it to discharge it self of its Excrements, that so the *Rectum* being empty'd, there may be more space for the Dilatation of the Passage; as also to stir up the Pains to bear the better downwards, through the Endeavours she makes when she is at Stool, and the while all necessary things for her Labour should be put in order, as well for the Woman, as the Child, a Midwife's Stool, or rather a * Pallet-bed girted, placed close by the Fire, if the Season require it; which Pallet ought to be so dis-engaged, as to be turned round about, the better to help the Woman when there is occasion.

* *The best way.*

If

If the Woman be * plethorick, it may be convenient to bleed her a little; for by this means, her Breaſt being diſingaged, and her Reſpiration free, ſhe will have more Strength to bear down her Pains, which ſhe may do without Danger; becauſe the Child being about that time ready to be born, hath no more need of the Mother's Blood for its Nouriſhment, which I have often practiſed with good Succeſs: Beſides, this Evacuation often hinders her having a Fever after Delivery, in Expectation of which Hour ſhe may walk about her Chamber, if her Strength permits; and to preſerve her Strength, it will be convenient to give ſome good Gelly Broths, new lay'd Eggs, or ſome Spoonfuls of burnt or brewed Wine, from time to time, or a Toaſt dipt in Wine, avoiding at that time ſolid Food. Above all, ſhe muſt be perſwaded to hold out her Pains, bearing them down as much as ſhe can, at the inſtant when they take her: The Midwife muſt from time to time taſte the inward Orifice with her Finger, to know whether the Waters are ready to break, and whether the Birth will ſoon after follow: She muſt likewiſe anoint all the bearing Place with emolient Oils, Hogs-greaſe, or freſh Butter, if ſhe perceive that they can hardly be dilated, and all the while ſhe muſt be near her Woman, to obſerve her Geſtures diligently, her Complaints and Pains; for by this they gueſs pretty well, how the Labour advanceth, without being obliged to taſte what comes from her Body ſo often.

* *Full of Blood.*

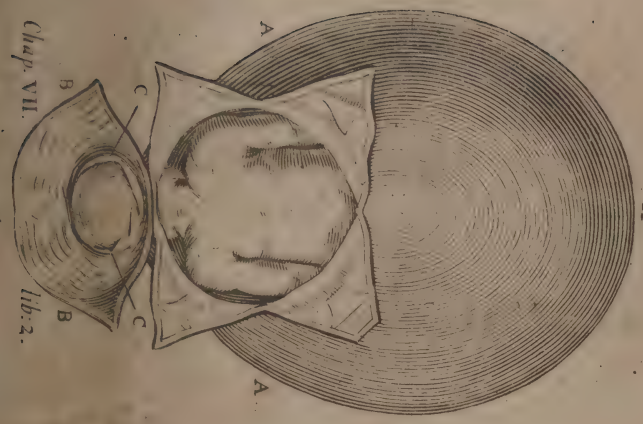
Mr. *De la Cuiſſe* deceaſed, who often ſlept near the Woman in Labour, was ſo uſed to it, that he never awaked till juſt the Child was in the Paſſage, and which time the Woman changeth her Moans into loud Cries, which ſhe ſtrongly repeats, becauſe of the greater and more frequent Pains which ſhe then feels: The Patient may likewiſe by Intervals reſt her ſelf on her Bed, for to regain her Strength; but not too long, eſpecially little, or ſhort thick Women, for they have always worſe

worse Labours if they lie much on their Beds in their Travail; and yet much worse of their first Children, than when they are prevailed with to walk about the Chamber, supporting them under their Arms, if necessary; for by this means, the Weight of the Child (the Woman being on her Legs) causeth the inward Orifice of the Womb to dilate sooner than in Bed; and her Pains to be stronger and frequenter, that her Labour be nothing near so long.

Qualms and Vomitings, which often happen to Women in Labour, ought not to amaze any; for on the contrary, it furthers the Throws and Pains provoking downwards. We shewed the Cause of this Vomiting in the second Chapter of this Book, and the Reason why it is not dangerous.

When the Waters of the Child are ready and gathered, which may be perceived through the Membranes to present themselves to the inward Orifice, of the bigness of the whole Dilatation, the Midwife ought to let them break of themselves, and not as some, that, impatient of the long Labour, break them; intending to hasten their Business, which on the contrary they retard by so doing, before the Infant be wholly in the Passage; for by the too hasty breaking of these Waters, which ought to serve him to slide forth with greater Facility, he remains dry, which hinders afterwards the Pains and Throws from being so effectual to bring forth the Infant, as else they would have been; it is therefore better to let them break of themselves, and then the Midwife may easily feel the Child bear, by the part which first presents, and so judge certainly whether it comes right, that is, with the Head, which she shall find hard, big, round, and equal; but if it be any other part, she will perceive something inequal, and rugged, and hard or soft, more or less, according to the part it is. Immediately after * let her hasten to deliver her Woman,

* *That being the right time when all Women ought to be delivered, if Nature perform its Office.*



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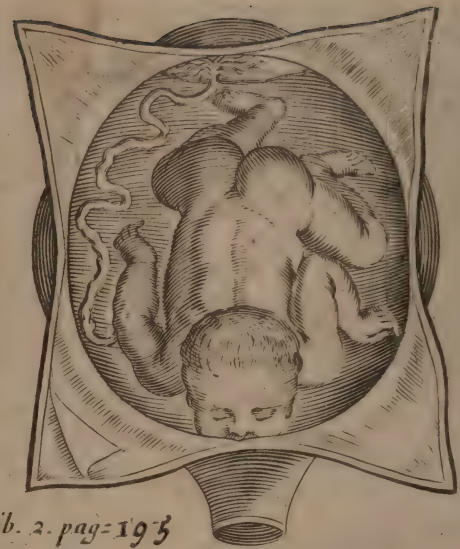

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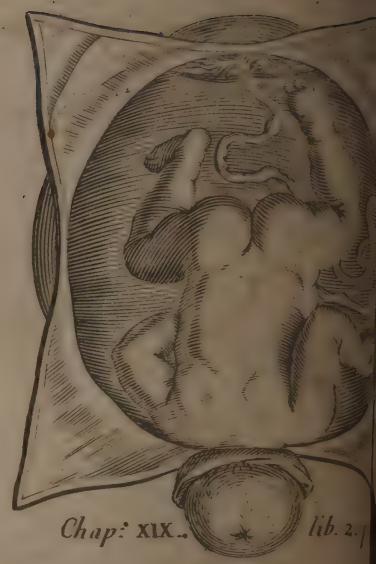

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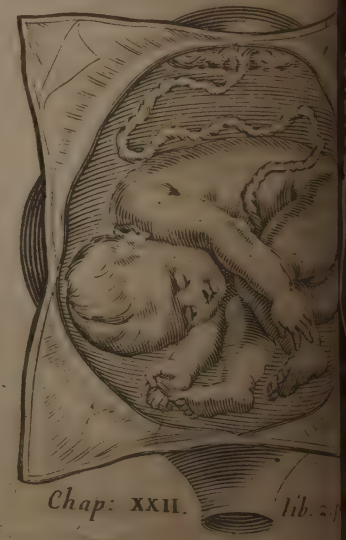

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man, if she be not already, and assist the Birth, which ordinarily happens soon after, if natural, and may be done according to the Directions in the next Chapter: But if she finds the Child to come wrong, and that she is not able to deliver the Woman * as she ought to be, by helping Nature, and so save both Mother and Child, who both are in danger of their Lives, let her send speedily for an expert and dextrous Chirurgeon in the Practice, and not delay, as too many of them very often do, till it be reduced to Extremity.

* *Mark, 'tis not enough to lay a Woman, if it might be done by another with more Safety and Ease to either or both.*

There are many Midwives, who are so afraid that the Chirurgeons should take away their Practice, or to appear ignorant before them, † that they chuse rather to put all to Adventure, than to send for them in Necessity: Others are so presumptuous, as to believe themselves as capable as the Chirurgeons to undertake all. And some there are indeed, who are not so wicked, yet for want of Knowledge and Experience in their Art, hope still in vain, that the Child in time may change to a better Posture, and that the Accidents will cease (if it please God, as they say;) and some do maliciously put such a Terror and Apprehension of the Chirurgeons in the poor Woman, ‖ comparing them to Butchers and Hangmen, that they chuse rather to die in Travail with the Child in their Womb, than to put themselves into their Hands: But indeed such Midwives do more justly deserve this fair Title, unless they behave themselves with more Prudence and equal Conscience in so important an Occasion, and send * in time for some Assistance in their Business, before the Child be (as very often) engaged in a wrong Posture in the Passage, so as it is almost impossible to give it a better, with-

† *Good avoiding such Midwives, if Women value their Lives.*

‖ *For the most part undeservedly.*

* *A necessary Note.*

without extream Violence to the Woman, which is alſo the Cauſe of the Death of the Child; and they would be ſo far from loſing their Reputation, that they would augment it, becauſe by ſo doing, it would be manifeſt they were not ignorant of the Danger both of time and place; and the Chirurgeon being called, as ſoon as Neceſſity required it, could have no juſt Cauſe to impute any ill Conſequence of the Labour to them, though it ſhould ſo fall out, and their Conſcience would be diſcharged of it: For in this Caſe (as we have ſaid) both the Mother's and Child's Life is at Stake.

As ſoon then as the Waters are broke, and the Midwife finds the Child to come wrong, ſhe muſt adviſe the Woman not to forward her Pains, leſt by bearing down ſhe engage the Child too much in the Paſſage, and ſo give the Chirurgeon more Pains to turn it, and muſt ſend for him as ſoon as may be, to deliver her, as Occaſion requires, and according as ſhall be directed hereafter in this Book. It is now time, after having declared what muſt be done whilſt the Woman is in Labour, to ſhew how ſhe muſt be helped and comforted in a natural Delivery.

This Figure doth very well repreſent the Globe of the Womb, which is opened but in part, to ſhew in what manner the Child is brought forth in a natural Labour.

A A A *Shews the Body of the Womb.*

B B *A part of the* Vagina, *or Neck of the Womb, opened juſt at the inward Orifice.*

C C *The inward Orifice, which ſurrounds the Child's Head like a Crown, wherefore it is called the Crowning, or Garland.*

CHAP.

CHAP. VIII.

Of a natural Labour, and the Means of helping a Woman therein, when there is one or more Children.

WE have already taught that there are four things requisite to a truly legitimate and natural Labour: to wit, that it be at full time, that it be speedy, without any ill Accident; that the Child be alive; and that he comes right; all which being found to be so, and after the Waters be broke of themselves, as above-said, let the Woman be presently placed on the Pallet-bed, provided for her to this purpose near the Fire; or she may, if she likes it better, be delivered in her ordinary Bed: For all Women are not accustomed to be delivered in the same Posture; some will be on their * Knees, as many in Country Villages; others standing upright, leaning with their Elbows on a Pillow upon a Table, or the side of a Bed; and others lying upon a Quilt in the midst of the Chamber; but the best and surest is to be delivered in their Bed, to shun the Inconvenience and Trouble of being carried thither afterwards; in which case it ought to be furnished rather with a Quilt than a Feather-bed, having upon it Linnen and Clothes in many Folds, with other Necessaries to be changed according to Necessity, for to hinder the Blood, Waters, and other Filth which is voided in Labour, from incommoding the Woman afterwards.

* *A dangerous way.*

The Bed must be so made, that the Woman being ready to be delivered, should lie on her Back upon it, having her Body in a convenient Figure, that is, her Head and Breast a little rais'd, so that she be neither lying nor sitting; for in this manner she breathes best, and will have more Strength to help her Pains, than if she were otherwise, or sunk down in her Bed. Being

in

in this Posture, she must spread her Thighs abroad, folding her Legs a little towards her Buttocks, somewhat raised by a small Pillow underneath, to the end that the *Coccyx*, or Rump, should have more Liberty to retire back, and have her Feet stayed against some firm thing; besides this, let her hold some Persons with her Hands, that she may the better stay her self during her Pains. She being thus placed near the side of her Bed (with her Midwife by, the better to help upon occasion) must take Courage, and help her Pains the best she can, bearing them down when they take her, which she may do by holding her Breath, and forcing her self, as much as she can, just as when she goeth to Stool; for by such Endeavours, the* *Diaphragma* being strongly thrust downwards, doth force down the Womb and Child in it: In the mean time the Midwife must comfort her, and desire her to endure her Labour bravely, putting her in hopes of a speedy Delivery. Some would have another Woman at that time to press the superior Parts of her Belly, and so thrust gently the Child downwards; but I am not of their Opinion, because such Compressions will rather hurt than profit, by endangering the bruising of the Womb, which is extreme sore at that time; and I have seen some Women very ill afterwards, for having been used in this manner. But the Midwife may content her self only (having neither Ring nor Bracelet on, and her Hand anointed with Oyl or fresh Butter) to dilate gently the inward Orifice of the Womb, putting her Fingers ends into its Entry, and stretching them one from the other, when the Pains take her, thus endeavouring to forward the Child, and thrusting by little and little the sides of the Orifice, towards the hinder part of the Child's Head, anointing these Parts also with fresh Butter, if it be necessary.

* *The Midriff.*

When the Infant's Head begins to advance into this inward Orifice, 'tis commonly said it is crowned, because it girds and surrounds it, just as a Crown; and when

when it is so far, that the Extremity begins to appear manifestly without the Privy-Parts, it is then said the Child is in the Passage, and the Woman in Travail imagines (altho' untruly, and it may be is not so much as touched by her) that her Midwife hurts her with her Fingers, finding her self as it were scratched and pricked with Pins in those Parts, because of the violent Distention, and sometimes Laceration, which the Bigness of the Child's Head causeth there.

When things are in this Posture, the Midwife must seat her self conveniently to receive the Child, which will soon come, and with her Fingers ends, her Nails being close pared, endeavour to thrust (as abovesaid) this crowning of the Womb back over the Head of the Child, and as soon as it is advanc'd as far as the Ears, or thereabouts, she may take hold of the two sides with her two Hands, that when a good Pain comes, she may quickly draw forth the Child, taking Care that the Navel-string be not then entangled about the Neck, or any other part, left thereby the After-burthen be pulled with Violence, and possibly the Womb also to which it is fastened, and so cause Flooding, or else break the String, whereby the Woman may come to be more difficultly delivered. It must also be observed, that the Head be not drawn forth strait, but shaking it a little from one side to the other, that the Shoulders may the sooner and easier take its Place, immediately after it be past, which must be done without losing any Time, left the Head being past, the Child be stopt there by the Bigness and Largeness of the Shoulders, and be in danger of being suffocated and strangled in the Passage: But as soon as the Head is born, if there be need, she may slide in her Fingers under the Arm-pits, and the rest of the Body will follow without any Difficulty.

As soon as the Midwife hath in this manner drawn forth the Child, she must put it on one side, left the Blood and Waters, which follow immediately after, should incommode it, or it may be choak it, by running into its

its Mouth or Nose, as it would do, if it were laid on the Back; after which there remains nothing but to free her from the After-burthen, which I will show how in the next Chapter: But before that, let her be very careful to examine, whether there be no more Children in the Womb; for it happens very often that there are two, and sometimes more, which she may easily know by the Continuance of the Pains after the Child is born, and the Bigness of the Mother's Belly; besides this, she may be very sure of it, if she puts her Hand up the Entry of the Womb, and finds there another Water gathering, and a Child in it presenting to the Passage; if it be so, she must have a care not to go about to fetch the After-birth till the Woman be delivered of all her Children, if she have never so many, because Twins never have but one Burthen *, to which there are fasten'd as many Strings and distinct Membranes as there are Children; and if one should go to draw it forth as soon as the first is born, the rest would be in Danger of their Lives, because that part is very necessary to them whilst they are in the Womb, and besides it endangers a flooding. Wherefore the first string must be cut, being first ty'd with a Thread three or four times double, as we shall shew more exactly hereafter, and fasten the other End with a String to the Woman's Thigh, not so much for fear that the String should enter again into the Womb, as to prevent the Inconvenience it may cause to the Woman by hanging between her Thighs; afterwards, this Child being removed, they must take care to deliver her of the rest, observing all the same Circumstances as was to the first; which being done, it will then be convenient to fetch the After-birth *, as we shall shew in the following Chapter.

* *A great Error.*

* *Or After-births.*

CHAP.

CHAP. IX.

How to fetch the After-Burthen.

MOST Animals, when they have brought forth their Young, caſt forth nothing elſe but ſome Waters, and the Membranes which contained them; but Women have an After-birth, of which After-Labour they muſt be deliver'd, as of a thing uſeleſs and inconvenient: Wherefore as ſoon as the Child is born, before they do ſo much as tie or cut the Navel-ſtring, leſt the Womb cloſe, they muſt, without loſing time, free the Woman from this fleſhy Maſs, which was deſtin'd to furniſh the Infant with Blood for its Nouriſhment whilſt it was in the Womb, and which at that time is called with much reaſon the *After-birth*, becauſe it follows the Child, and is to the Woman like another Birth; for being brought forth, ſhe is totally deliver'd.

To perform this, the Midwife having taken the String, muſt wind it once or twice about one or two of the Fingers of her left Hand joined together, the better to hold it, with which ſhe may then draw it moderately, and with the right Hand ſhe may only take a ſingle hold of it above the left near the Privities, drawing likewiſe with that very gently, reſting the while the Fore-finger of the ſame Hand extended and ſtretch'd forth along the String towards the Entry of the *Vagina*, as may be ſeen in the annexed Figure; always obſerving, for the more Facility, to draw it from the ſide where the Burthen cleaves faſt, for in ſo doing the reſt will ſeparate the better; juſt as we ſee a Card which is glewed to any thing, is better ſeparated from the Place where it begins to part, than where it is cloſe joined.

Above all things, care muſt be taken, that it be not drawn forth with too much Violence, leſt by breaking the String near the Burthen, as ſometimes happens, you * be oblig'd to put up the whole Hand into the

* *Not fit to be undertaken but by very skilful Perſons.*

Womb, to deliver the Woman; or that the Womb, to which this Burthen is sometimes very strongly fastned, be not drawn forth with it, as hath been done to some that I knew: As also in drawing it forth with too much Violence, there may happen a very great Flooding, which would be of dangerous Consequence: Wherefore for these Reasons it must be carefully shaken, and gently drawn forth by little and little, after the manner we have just now described; and to facilitate the better its Expulsion, the Woman may blow strongly the whilst into her Hands shut, just as one would into the Mouth of a Bottle, to know whether it be broke; or she may put her Finger into her Throat, as if she would excite Vomiting; or else strive as if she were going to Stool, bearing always down, and holding her Breath as she did to bring forth her Child: All these Motions and different Agitations produce the same Effect, and loosen and expel the After-birth out of the Womb. When all these Circumstances have been observed, if notwithstanding you meet with difficulty, you may, if need be, after that you know on which side the After-birth is situated, command an experienc'd Nurse-keeper to press the Belly lightly with the Flat of her Hand, directing it gently downwards by way of Friction, above all being careful not to do it too boisterously. But if all this be in vain, then must the Hand be directed into the Womb, to loosen it, and separate it after the manner hereafter mention'd in the 13th Chapter of this Book, where we show the way how to draw it forth when the String is broke.

As soon as the Woman is delivered of both Child and Burthen, it must then be considered, whether there be all, and Care had that not the least part of it remain behind, not so much as the Skirts or any Clods of Blood, which ought all to be brought away with the first, for otherwise being retained, they cause great Pains: All which being done, things fit for Mother and Child in this Condition must be provided, which we will mention in their Place.

When

When a Woman hath two Children, she must be delivered in the same manner as if she had but one; observing only, for the Reasons given in the precedent Chapter, not to fetch the Burthen till all the Children are born; and then it may be done without Danger, shaking, and drawing it always gently, sometimes by one String, sometimes the other, and sometimes by both together, and so by turns till all is come, proceeding in it according to the Directions already given.

When the Infant comes right and naturally, the Woman is brought to Bed and deliver'd with little help, observing what hath been taught in the two last Chapters, of which the meanest Midwifes are capable, and oft-times for want of them, a simple Nurse-keeper may supply the Place: But when it is a wrong Labour, there is a greater Mystery belongs to it, for then the Skill and Prudence of a Chirurgeon is for the most part requisite; which we intend now in the remaining part of this Book to treat of.

CHAP. X.

Of laborious and difficult Labours, and those against Nature, their Causes and Differences, together with the Means to remedy them.

FOR the easier and better explaining these things, we say, that there are three Sorts of bad Labours; to wit, the Painful or Laborious, the Difficult, and that which is altogether contrary to Nature.

The Laborious is a bad Labour, in which the Mother and Child (though it comes right) suffer very much, and are haraſſed more than ordinary.

The Difficulty is not much unlike the first, but besides is accompanied with some Accident which retards it, and causeth the Difficulty: But the wrong Labour, or that against Nature, is caused by the bad Situation of the Child, and can never be helped but by manual Operation, or the Chirurgeon's Hand. In

the laborious and difficult Labours, Nature always doth the Work, being a little assisted: But in that, contrary to Nature, all its Endeavours are vain and useless, and there is then no help but in an expert Chirurgeon, without whom she must certainly perish.

The Difficulties of Labour proceed either from Mother, Child, or both.

From the Mother, by reason of the Indisposition of her Body; or it may be from some particular part only, and chiefly the Womb; or also from some strong Passion of the Mind, with which she was before possest.

In respect of her Body, either because she may be too young, having the Passages too strait, or too old of her first Child; because her Parts are too dry and hard, and cannot be so easily dilated, as happens also to them which are too lean: They who are either small, short, or mis-shapen, as crooked Women have not a Breast strong enough to help their Pains, and to bear them down; nor those that are weak, whether naturally or by Accident; and crooked Persons have sometimes the Bones of the Passage not well shaped: They who are tender, and too apprehensive of Pain, have more Trouble than others, because it hinders them from doing their Endeavour; and they likewise who have small Pains and slow, or have none at all. * Great Cholicks hinder Labour also, by preventing the true Pains: all great and acute Diseases make it very troublesome, and of a bad Consequence, according to *Hippocrates*'s Opinion in the 30th Aphorism of his 5th Book; *Mulierem gravidam morbo quopiam acuto corripi, lethale.* As when she is taken with a violent Fever, a great Flooding, frequent Convulsions, Dysentery, or any other great Distemper. Excrements retained cause much Difficulty, as a Stone in the Bladder, or when it is full of Urine, without being able to void it; or when the great Gut is repleted with hard † Ordure, or the Woman troubled

* *Sometimes the Child is born and the Woman scarce privy to it, the Pains of the Cholick so far exceeding those of Labour.*

† *In this Case use Clysters.*

bled with great and painful Piles, and their ill Situation ſometimes retard it extreamly.

As touching the Difficulty proceeding from the Womb only, it muſt either be from its bad Situation or Conformation, having its Neck too ſtrait, hard, or callous, whether naturally, or by any Accident, as having had there a Tumor, Apoſtume, Ulcer, or ſuperfluous Fleſh, whether on the Neck, or inward Orifice: Or becauſe of any *Cicatrice* cauſed by a preceding bad Travail.

Beſides, thoſe things which are or may be contained in the Womb with the Child, do alſo cauſe difficult Travail; as when the Membranes are ſo ſtrong, that they cannot be broken, which ſometimes hinders them from advancing into the Paſſage; or ſo tender, that the Waters break too ſoon, for then the Womb remains dry: When there is a *Mole*; or the After-burden comes firſt, which always cauſeth Flooding, and certainly the Death of the Infant, if the Woman be not preſently delivered of them by Nature or Art; yea, and when the Navel-ſtring comes firſt, the Child is ſuffocated, if not ſpeedily after born; ſtrong Paſſions of Mind do likewiſe contribute much to it, as Fear, Sorrow, and others of the like Nature. The Woman that miſcarries hath more Pain than a Woman at her full time, as alſo than one that is hurt, altho' ſhe be very near her time.

As to the hindrances cauſed by the Infant, they are, when either its Head or whole Body are too large; when the Belly is *hydropical*; when it is monſtruous, having two Heads, or being joined to another Child, Mole, or any other ſtrange thing; when it is dead, or ſo weak, that it contributes nothing to its Birth; when it comes wrong, or when there are two or more: Beſides all theſe different Difficulties of Labour, there is yet one cauſed by the Midwife's Ignorance, who for want of underſtanding her Buſineſs, inſtead of helping, hinders Nature in its Work.

Let us now treat of the Means, by which all theſe

may be prevented, and the Woman ſuccoured in her bad and difficult Labour, as may eaſily be done, if we perfectly know the Cauſes of all theſe Difficulties; as when it happens by the Mother's being too young and too ſtrait, ſhe muſt be gently treated, and the Paſſages anointed with Oil, Greaſe, and freſh Butter, uſing theſe things a long time before the Hour of Labour, to relax and dilate them the eaſier, leſt there ſhould happen a Rupture of any part, when the Child is born: For ſometimes there happens a Dilaceration to the Fundament, by which both are rent into one outwardly. If a Woman be in Years of her firſt Child, let her lower Parts be likewiſe anointed to mollify the inward Orifice, and the *Vagina* or Neck of the Womb, which being more hard and callous, do not eaſily yield to the neceſſary Diſtention of Labour; which is the Cauſe why ſuch Women are longer in Labour than others, and why their Children, (being forced againſt the inward Orifice of their Womb, which is, as we have ſaid, a little callous, and alſo for remaining long in the Paſſage) are born with great Bumps and Bruiſes on their Heads. Small and miſ-ſhapen Women ſhould not be put to Bed, till at leaſt their Waters be broke; but rather kept upright and walking about the Chamber, if they have Strength, being ſupported under the Arms; for in that manner they will breathe more freely, and mend their Pains better, than on the Bed, where they lie all on a Heap. Let thoſe that are very lean, alſo moiſten theſe Parts with Oils and Ointments, to make them more ſmooth and ſlippery, that the Head of the Infant and the Womb be not ſo compreſſed and bruiſed by the Hardneſs of the Mother's Bones, which form the Paſſage.

The weak Woman ſhould be ſtrengthned, the better to ſupport her Pains, giving her good Jelly Broths, with a little Wine and a Toaſt in it, or other good things, as the Caſe requires.

If ſhe fears the Pains, let her be comforted, aſſuring her, that ſhe will not endure many more, but be ſpeedily

dily delivered; on the contrary, if her Pains be slow and small, or none at all, they must be provoked by frequent, and somewhat strong Clysters, that so they may be excited by the Needings at Stool; and afterwards let her walk about her Chamber, that the Weight of the Child may also help a little. If the Woman floods, or hath Convulsions, *(which is by many too long neglected)* she must be help'd by a speedy Delivery, as we have already declared, and shall repeat hereafter in its proper Place. If she be costive, let her use Clysters, which likewise may dissipate a Cholick, at those times very troublesome, causing great and useless Pains, very hurtful, because they fleet to and again through the Belly, without bearing down as they should do. If she cannot make Water, because the Womb bears too much on the Bladder, let her try, by lifting up her Belly a little, or else by introducing a *Catheter* into her Bladder, draw forth her Urine.

If the Difficulty or Slowness of the Labour comes from the ill Posture of the Woman, let her be placed in a better, more convenient to her Habit and Stature, observing the Circumstances given in the 1st Chapter of this 2d Book. If she be taken with any Distemper, she must be treated for it according to its Nature, with more Caution than at another time, having always regard to her present Condition. If it proceed only from the Indispositions of the Womb, either from its oblique Situation, it must be remedied as well as can be, by the placing of her Body accordingly. If it be by its vicious Conformation, having the Neck too hard, and too callous, and too strait, it must be anointed with Oils and Ointments, as above directed.

If it come from a strong Cicatrice, which cannot be mollified, of a preceding Ulcer, or a Rupture of a former bad Labour so agglutinated, it must be separated with a fit Instrument, lest another Laceration happen in a new Place, and leave the Woman in a worse Condition than before; it must be made in that place

where the Case most requires it; taking care that it be not upwards, because of the Bladder. If the Membranes be so strong, as that the Waters do not break in due time, they may be broken with the Fingers, * provided the Child be come very forward into the Passage, and ready to follow presently after; for otherwise there is Danger, that by breaking these Waters too soon, the Child will remain dry a long time; and to supply that Defect, you must moisten the Parts with Fomentations, Decoctions, and emolient Oils; which can never be so well, as when Nature doth its own Work with the Waters and ordinary Slime, which always happen well when they come in time and place.

* *Let the Midwife be first well assur'd.*

Sometimes these Membranes with the Waters press three or four Fingers breadth out of the Body before the Child, resembling a Bladder full of Water; there is then no great Danger to break them, if they be not already; for when it so happens, the Child is always ready to follow, being in the Passage: But above all be careful not to pull it with your Hand, left thereby you loosen, before its time, the After-burthen, to which it adheres very strongly. If the Navel-string comes first, it must be presently put up again, and kept up if possible, or else the Woman must be immediately delivered: But if the After-burthen comes first, it must never be put up again; for being come forth, it is altogether useless to the Infant, and would be but an Obstacle and Hindrance in the way; if it were put up in this Case, it must be cut off, having tied the Navel-string, and afterwards draw forth the Child as soon as may be, left that he be suffocated.

If the Woman hath had a Fall, or is hurt, let her immediately keep her Bed and take her Rest: If it be any Passion that retards the Labour, and cannot totally be overcome, let them endeavour to moderate it: If it be Shame-facedness or Modesty, the Persons who are the Cause of it must quit the Chamber; and if it be Timidity and Fear of Pain, she must be advised,

that

that it is the Will of God it ſhould be ſo, and that her Labour will not be ſo bad as ſhe imagines, perſwading her to ſubmit to the Neceſſity, preſſing on her the Conſolation of the Unfortunate, whoſe Pain always ſeems more ſupportable by the Conſideration that it is common; ſo ſhe muſt be informed that others endure the ſame Pain, and greater than hers: If ſhe be melancholly, let her be diverted by ſome good News, promiſing her ſuch a Child as ſhe deſires; and in a word (tho' ſhe ſuffer much) ſhe muſt conſider it but as a bad Journey, which one quarter of an hour of good Weather makes one forget all paſt, as ſhe will, when ſhe is brought to Bed; aſſuring her chiefly that ſhe is in no Danger, eſpecially when it is not very apparent, for then one ought to acquaint her with it, that ſhe may ſettle both her temporal and ſpiritual Affairs.

When the Difficulty is only cauſed by a dead Child, the Method mentioned in the natural Labour muſt be obſerved; and beſides, the Woman muſt do all ſhe can to further her Delivery, becauſe the Child can do nothing, nor can it when it is very weak: She muſt take in the Interim ſome Comfortatives to prevent Fainting, becauſe of the putrid Vapours aſcending from the dead Child; but when it hath ſo great a Dropſy, either in the Head or Belly, as that it cannot be born, becauſe of the great Diſtenſion and Bigneſs of theſe Parts, then we are obliged to open theſe Parts to let out the Water: And if it be of an enormous Bigneſs, either Head or Body, or that it hath two Heads, or is joined to another Child, or to a big Mole, there is a Neceſſity, for to ſave the Mother, either to dilate the Paſſage proportionable to the Bigneſs of the monſtruous Child, if it be poſſible; or elſe, which is better, to draw forth the Child by pieces, to prevent the Mother's periſhing together with the Child, which elſe would certainly happen, if this Courſe be not taken: And if there be two Children, the Rules given in the 8*th* Chapter of this 2*d* Book muſt be obſerved. But if the Midwife cannot remedy all

all these Accidents, she must then readily send for * an expert Chirurgeon for his Advice, or to do what he thinks fit. Let us now pass to Labours contrary to Nature, which can never be done without manual Operation, and show what is then to be done.

* *By all which may be learnt, That if the Midwife cannot lay the Woman as soon as, or soon after the Water is broke, she ought in time to send for Advice and Help.*

CHAP. XI.

Of unnatural Labours, where manual Operation is absolutely necessary, and what Observations the Chirurgeon must make before he goeth about it.

THose Labours which absolutely require manual Operation, are, when the Child comes wrong: *Hippocrates* in his Book, *De Naturâ Pueri*, and in that *De Superfœtatione*, admits but of three general ways for a Child to be born, to wit, with the Head first, which is the sole * natural Figure, when it comes right; the second with the Feet; and the third with the Side or A-cross: Which two last are quite contrary to Nature. But to make it more plain, we say, that a Child may come *wrong* four several general ways, which are; First, any of the foreparts of the Body. Secondly, any of the hinder Parts. Thirdly, either side. And fourthly, the Feet. Now just as there are four Cardinal Points, to which all the rest of the thirty two Winds may be reduced on the Compass, and to one of the four more than to the other, according as they participate of more or less of that Point: So likewise all the particular and different wrong Postures, that a Child may present, can be reduced to the above-named four general ways, according as they approach more to the one than to the

* *For if any part but the Crown, so that the Body follow not in a streight Line, 'tis a wrong and difficult Birth, tho' the Head presents first.*

the other of them. And as the Number of the several wrong Births is very great, we will be contented only to treat particularly of each of the principal of them; because if one be well informed of these, they may easily remedy the rest, which are of no great Consequence; but before we mention the Means how, it will be convenient to shew what Conditions are requisite in a † Chirurgeon, that would apply himself to this Operation, and the Observations he ought to make before he undertakes it.

† *Physician, or any else that practiseth this Art.*

These Conditions either respect his Body or his Mind; in respect of his Person, he must be healthful, strong and robust; because this is the most laborious and painful of all the Operations of Chirurgery; for it will make one sometimes sweat, that he shall not have a dry Thread, tho' it were the coldest Day in Winter, because of the great Pains and Difficulty he ordinarily meets with, as *Fabricius* of *Aquependente* testifies; confessing that he hath often been so weary and tired, as that he hath been forced to leave the Work for his Men to finish. He ought to be well shaped, at least to outward Appearance; but above all, to have small Hands for the easier Introduction of them into the Womb when necessary; yet strong, with the Fingers long, especially the Fore-finger, the better to reach and touch the inner Orifice: He must have no Rings on his Fingers, and his Nails well pared, when he goeth about the Work, for fear of hurting the Womb: He ought to have a pleasant Countenance, and to be as neat in his Clothes as in his Person, that the poor Women who have need of him, be not affrighted at him. Some are of Opinion, that a Practitioner of this Art ought on the contrary to be slovenly, at least very careless, wearing a great Beard, to prevent the Occasion of the Husband's Jealousy that sends for him. Truly some believe this Policy augments their Practice, but 'tis fit they should be disabused; for such a Posture

and

and Dreſs reſembles more a *Butcher* than a *Chirurgeon*, whom the Woman apprehends already too much, that he needs not ſuch a Diſguiſe: Above all, he muſt be ſober, no Tipler, that ſo he may at all times have his Wits about him; he muſt be diſcreet, modeſt, and ſecret, never diſcovering to Strangers thoſe Incommodities and Diſeaſes of Women which come to his Knowledge; he muſt be ſage, prudent, and judicious, to conduct him always in his Operations, with good Reaſon; he muſt be pitiful, yet not ſo as to diſtract or hinder him from his Duty, when the Caſe requires; as alſo ſo patient, as not to precipitate any thing, but taking time ſufficient to conſider what is fit to be done. He muſt not be angry with the poor Woman, tho' ſhe exclaims againſt him, or the other Women during the Operation; for the Pains of the one, and the Compaſſion of the reſt, oblige them to it without other cauſe. He ſhould be a good Chriſtian, of a well regulated Conſcience, and do his beſt Endeavour to bring the Children * alive: He muſt deliver poor Women *gratis*, and treat them as tenderly, and with as much Humanity as the Rich, extorting nothing from them, but be content with ſuch reaſonable Satisfaction, as they are willing and able to give, and not to uſe them like a *Turk* or *Arab*, as ſome do, who as ſoon as they have done their Work, whether well or ill, will be pay'd without Delay, and that with ſo much ill Manners and Importunity, that they force the poor People preſently to borrow the Money, when they have not enough to ſatisfy their Deſires, and take from 'em to the laſt Penny, to ſatisfy their tyrannical Avarice: Which Proceedings are very unbecoming an honeſt Man.

* *And therefore undertake what he can ſafely perform; and what he cannot, leave to others that may, for Life is not to be play'd with.*

In fine, a Chirurgeon indued with all theſe good Qualities, muſt be for his Accompliſhment and intire Perfection, very knowing and expert in his Art, and chiefly in theſe Operations.

There

There are many who believe it an easy Matter to deliver a Woman, because Women usually practise it. In effect, there is no great Mystery when all things come right and well: But when they come wrong, and contrary to Nature, it is most certain, that it is the most difficult and laborious of all Chirurgical Operations, as is well known to such as practise it. It is very good to consider the Consequences of it; for in all others, for which Recourse is had to a Chirurgeon, the single Life of the Patient only is under his Care; But in Deliveries there is the Mother's, and one Child's Life at least, and sometimes more at stake. And it hath been often seen, that one single Fault in this Operation hath caused many Disorders at one time; so that one may say very justly touching delivering of Women in wrong Labours, *Hoc opus, hic Labor est.*

Now the Chirurgeon, qualify'd as aboveſaid, is only fit for the Work, (to behave himself as he ought) must make some Observations before he undertakes it; first, whether the Woman hath Strength enough to endure the Operation, which he may guess by the Pulse, if strong or weak, unequal or intermittant: whether her Face, and chiefly her Eyes, be dejected, her Speech faint, the extream Parts of her Body cold; whether she often faints away with cold Sweats, hath Convulsions, with Loss of Sense; In short, if every Circumstance perswades that the Operation would be in vain, 'tis better to let it alone, than she should die under his Hand, and he be blamed for it, and incur the Name of Butcher, as is most certain when such a Misfortune happens: However, if there be any hope, tho' never so little, either for Mother or Child, we are oblig'd in Conscience to do what Art commands, and not as some Politicians, who will rather suffer a poor Woman to die without Assistance, than undertake a doubtful Operation. Wherefore 'tis better to attempt an Operation of an uncertain Consequence, than to abandon the Sick to a certain Despair; * for sometimes Nature recovers beyond

* *A sufficient Justification for conscientious*

entious Practisers, against the malignant Tongues of the Ignorant.

yond hope; but before the Chirurgeon undertakes it, let him give his Prognostick of the great Danger of Death both Woman and Child is in, which he must acquaint the Husband and Friends with, and the Woman her self, if he thinks that she is able to bear it, that so she may receive the Sacrament before the Operation, lest she be not capable of it afterwards; because of the Laboriousness of the Operation, in which she may possibly die, as it hath sometimes happened; but when the Woman hath Strength enough, the Chirurgeon must not delay his Help, for fear it abate, or be totally dissipated. To which purpose, being well assured of her Strength, he must enquire of the Woman, her Midwife and Friends, whether she be at her full time, or hath received any hurt, which he may also perceive by the Signs, observing in what Posture the Child presents, and what Circumstances, whether alive or dead; and but one or more? All which being examined, he must try to perswade the Woman of the Impossibility of her being deliver'd without his Help; and to resolve to put her self into his hands, which he may do by fair Words, without frighting of her, perswading her that the Operation is nothing so painful as she may imagine; and in fine, that for God's sake, her own, and the Child's, she is obliged to suffer it, or else she and her Child may both perish.

The Woman being thus resolved, he must place her cross the Bed, that he may operate the easier; she must lie on her Back, with her Hips raised a little higher than her Head, or at least the Body equally placed, when it is necessary to put back or turn the Infant, to give it a better Posture; but if he resolves to draw it forth, he must place the Woman so as we have directed in the natural Labour, which is with her Head and Breast a little elevated above the rest of her Body, that she may fetch her Breath with more Facility, and help to the Exclusion of the Infant by bearing down, when

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the Chirurgeon bids her. Being thus ſituated, ſhe muſt fold her Legs ſo as her Heels be towards her Buttocks, and her Thighs ſpread, and held ſo by a couple of ſtrong Perſons. There muſt be likewiſe others to ſupport her under her Arms, that her Body may not ſlide down when the Child is drawn forth, for which ſometimes a great Strength is required; the Sheet and Blankets muſt cover her Thighs for Decency ſake, in reſpect of the Aſſiſtants, and alſo to prevent her catching cold, the Chirurgeon herein governing himſelf as well with reſpect to his own Convenience, the Facility and Surety of the Operation, as to the other things.

Some would have the Woman bound in this Poſture, that (as they ſay) ſhe being more firm and ſtable, the Work may be done with greater certainty: But Ligatures are ſo far from that, that on the contrary they are very prejudicial; for the Woman being ſo fix'd, and conſtrained as on a Rack, ſhe cannot raiſe her ſelf, nor ſlide down, or be lifted up, when the Chirurgeon finds occaſion for it, to render his Operation leſs difficult, which uſually he doth, by partly putting back, partly drawing forth, ſometimes directly, ſometimes obliquely, for which reaſon her Body ought to be at Liberty, only held in a Poſture convenient to theſe ſeveral Intentions by her Friends, according to his Direction: But if ſhe muſt needs be bound, let it be with good Reaſons to perſwade her patiently to endure her Labour, and to contribute her whole Strength to the Operation, promiſing her the ſpeedieſt delivery poſſible.

Let the Chirurgeon then anoint the Entrance of the Womb with Oil or freſh Butter, if it be neceſſary, that ſo he may with more Eaſe introduce his Hand, which muſt likewiſe be anointed, having the Conditions above ſpecify'd: After which he muſt manage his Operations after the manner I ſhall direct in each of the following Chapters, having firſt recited the Marks by which may be known whether the Child be alive or dead.

CHAP.

CHAP. XII.

The Signs to know whether the Child be alive or dead.

IF there be any Case, wherein a Chirurgeon ought to make the greatest Reflection, and use most Precaution in his Art, it is this, * to know whether the Infant in the Womb be alive or dead; for there have been many deplorable *Examples* of *Children* being drawn forth alive, after they have been thought to be dead, with both Arms, or some other Limb lopt off, and others miserably killed by the Use of Crotchets, which might have been born alive, if they had not been mistaken. Wherefore before he resolves on the manner of laying the Woman, to avoid the like Misfortune, and the Disgrace of being Author of such a pitiful Spectacle, let him use his utmost Endeavour not to be so deceived, and to be fully satisfy'd whether the Child be alive or dead; always remembering, that in this Case Timidity is more pardonable than Temerity; that is, it is better to be deceiv'd in treating a dead Infant as if it were alive; than a living one as if it were dead.

** This is not so necessary to those Practitioners which can fetch a Child coming right, or with the Arm, without Hooks or sharp Instruments, as the Translator of this Book, and his Father and Brother can.*

The Child may be known to be alive, if it be at the full Reckoning, if the Woman hath received no hurt; if she hath had her Health well all her going with Child; if she be at that present in good Health, and very sure if she feels it stir, which may be known by the Mother's Relation: And the Chirurgeon may be better assured of it, if he feels it stir himself, laying his Hand on the Mother's Belly; to whose Relation he must not always trust, for I have sometimes deliver'd Women whose Children had been dead above four Days (as may easily be judg'd by their Corruption) who notwithstanding affirmed (altho' untruly) that they

they felt them ſtir but a little before they were deliver-ed; and others again, who were alive, yet they ne-ver perceived them to ſtir in *three* or *four* Days before, as they confeſſed. If the Chirurgeon cannot be aſſu-red by the Infant's Motion that is is alive, he may, as ſoon as the Waters are broke, gently put up his Hand into the Womb, to feel the Pulſation of the Navel-ſtring, which he will find ſtronger the nearer he feels it to the Infant's Belly; or if he meets with a Hand, he may feel the Pulſe, but their Pulſation is not ſo ſtrong as the Navel-ſtrings, by which it is beſt to be known: If then he finds thus the beating of the Pulſe, he may be confident the Child is alive; as alſo if by putting his Finger into its Mouth, he perceives it to ſtir its Tongue, as if it would ſuck.

But on the contrary, if the Child is dead, if it hath not a long time ſtirred; if there flows from the Womb ſtin-king and cadaverous Humours; if the Woman feels great Pains, and a great Weight in her Belly; if it be not ſupported, but tumbles always on that ſide as ſhe lays her ſelf; if ſhe faints * or hath Convulſions; if the Navel-ſtring or *Secondine* hath been a good while in the World; or if by putting his Hand into the Womb, he finds the Child cold, and the Navel-ſtring without Pulſe, and its Tongue immoveable; and feeling the Head, he finds it very ſoft, chiefly towards the Crown, where likewiſe the Bones are open, and riding the one upon the other at the *Sutures*, becauſe the Brains ſhrink, and are without Pulſe when the Child is dead; which corrupts more in two Days in the Womb, than it doth in four after it is born; which the Heat and Moiſtneſs of the Place cauſeth, the two Principles of Corruption.

* *Not always a Sign.*

But one may only conjecture it, if the Woman hath been hurt, or floods much, and be not at her full time; if her Waters broke four or five Days before; if her Breaſts flag; if her Complection be of a Lead-colour, her Countenance languiſhing and dejected,

and if her Breath * ſtinks. We ſay that theſe things may only make us conjecture it, but not as the reſt, certainly conclude it; many of which happening together in one Perſon, aſſure us that the Child is dead, for want of which it cannot be very certain; wherefore (as I have ſaid) 'tis good to be very careful before they undertake it, that ſo they may avoid the aboveſaid Scandals.

* *And not at any other time.*

CHAP. XIII.

How to fetch the After-burthen when the String is broke.

WE have placed the preſent way of extracting the After-birth amongſt unnatural Deliveries, becauſe 'tis not ſufficient to eſteem it a good Labour, that the Child be well born, unleſs alſo the After-birth be well come away. In reſpect of the Child it may be called natural; becauſe after his Birth, it hath no more need of the Burthen: But in reſpect of the Woman, it is very unnatural. I would therefore firſt treat of this bad Labour; becauſe it participates of a natural Labour in reſpect of the Child, who is in no danger, being born. After that I will come to thoſe in which both Mother and Child are in very great Danger, if not ſpeedily and skilfully helped.

I have already ſhewed in the 9th Chapter of this Book, how a Woman muſt be delivered in a natural Labour, where you may find the Means; but ſometimes the Midwife, by endeavouring it, breaks the String with pulling too ſtrongly, or becauſe it is very weak; or elſe ſo putrified when the Child is dead, that the leaſt Pull breaks it off cloſe at the Burthen, which by that means is left behind in the Womb; or becauſe it cleaves too ſtrongly, or the Woman is weak and cannot expel it, being much tired by a long Labour; or becauſe it was not ſpeedily after Labour drawn forth, the

the Womb closeth so, as leaves it no Passage, nor can it without much Difficulty be again dilated to have it fetch'd, because it remains dry after the natural Slime and Humidities, which usually flow in Labours, are sometimes past.

Since it is a Verity indubitable, that the After-birth remaining behind after the Child is born, becomes an useless Mass, capable of destroying the Woman, we must take care that it be never left, if possible. Wherefore having endeavoured to bring it away, as we have directed in the aforenamed Chapter, and the Navel-string happen to break near the Burthen, you must immediately, before the Womb closeth, introduce your Hand into it, being well anointed with Oil or fresh Butter, your Nails close pared, to separate it from the Womb gently, and draw it forth together with the Clods of Blood that are there. When the Navel-string is not broken, it will easily conduct the Hand by following of it to the Place where the Burthen is situated; but when it is broken, we have no longer this Guide, wherefore you must be then very careful, that you be not deceived in taking one part for another; as I once saw a Midwife pull the Womb near the inward Orifice, instead of the Burthen which was behind: But when she perceived all her Endeavours vain, without making the poor Woman suffer extreamly, she yielded her up to me, confessing her Incapacity, altho' she had vaunted * before, that she was more skilful in her Art than any Chirurgeon.

* *It seems Midwives in other Countries, as well as some in* England, *have that pernicious Vanity.*

As soon then as you have introduced your Hand into the Womb towards its Fund or Bottom, you will find the Burthen; which you may know by a great Number of little Inequalities, which are always made there by the Roots of the *Umbilical* Vessels, on the side where they terminate, which makes it to be easily distinguished from the Womb; if it yet cleave to it, notwithstanding that it is then a little wrinkled and

uneven; becauſe its Membranes, which were very much enlarged, contract themſelves immediately after the Child and its Waters, which kept them extended, are excluded: † But they that are expert in this Art can eaſily judge of it. If you find the Burthen wholly looſened from the Womb, it will not be difficult to draw it forth, when you have got it in your Hand: But if it cleaves, find out the ſide where it ſticks faſt, and begin there to ſeparate it gently, by putting ſome of your Fingers between it and the Womb, continuing by little and little to do ſo, till it be quite looſe, and afterwards draw it forth very carefully; obſerving always (if it cannot be otherwiſe) rather to leave ſome part of it behind, than to ſcrape or ſcratch the leaſt part of the Womb, for fear of a Flooding, Inflamation, or Gangrene, which cauſe Death; being alſo careful not to draw it forth till it be wholly or the moſt part of it ſeparated, for fear of drawing forth the Womb with it; and preſerve it as whole as the Circumſtances will permit, becauſe of ſhewing it to the Company, that they may know the Operation is well done.

† *Be careful of thoſe that are not.*

When the Chirurgeon finds not the Womb open enough for to receive his Hand immediately into it, let him * preſently anoint all the Woman's Privities with Hogs-greaſe, that they may be dilated with more eaſe, afterwards let him by little and little put up his Hand, but without much Violence: the Woman may likewiſe contribute to this Dilatation, as alſo to the Excluſion of the Burthen, if ſhe bears ſtrongly down, holding her Breath, and exciting her ſelf to vomit, or ſneeze, and do thoſe other things directed in the above-mentioned Chapter; but if notwithſtanding all this ſhe cannot void the After-birth; and if the Womb cannot be dilated enough to fetch it, or that it cleaves ſo faſt, as it cannot be ſeparated, then to avoid the greater Miſchief, we muſt leave it to Nature, aſſiſting her

* *Danger in Delays.*

her with Remedies which ſuppurate; wherefore Injections into the Womb are proper, made of *Mallows*, *Marſh-mallows*, *Pellitory*, and *Linſeed*, in which is mixed a good Quantity of Oil of *Lillies*, or freſh Butter. This Injection ſoftens and tempers, and by moiſtning and mollifying, makes the Orifice to be the eaſier dilated, and helps by Suppuration the Looſenings of the Burthen. And to haſten the Expulſion of it, give her a ſtrong Clyſter, that ſo, by the Motions to go to Stool, it may cauſe the voiding of it, as it hath ſucceeded with many, who have rendred it in the Bed-pan, and ſometimes when they have leaſt expected it.

One may at the ſame time, to prevent a Fever, and many other Accidents which uſually happen, bleed her in the Arm or Foot, according as it may be neceſſary and convenient, and ſtrengthen her, that the *Fœtus* and cadaverous Vapours, coming from the Putrifaction of the Burthen, aſcend not to the noble Parts, which may be done by good Cordials often uſed, not ſuch as are made of *Theriacle* * *Mithridate*, or the like, for which no Reaſon can be given, but their ſpecifick or rather imaginary Faculties, and are fitter to cauſe Vomiting than comfort the Heart: But true Cordials are ſuch as yield good Nouriſhment, and at the ſame time comfort the Stomach, without nauſeating it, as thoſe Drugs do which are only good for them that ſell them.

* *Sure their Compoſitions are much different in* France *from ours.*

Wherefore let her have good Broths and Gellies; ſhe may drink *Limonade* or *Orengeade*, or have in her *Ptiſan* Syrup of *Limons* or *Pomgranates*, or from time to time (if ſhe be weak and free from a Fever) a little Wine and Water mixed, which we ſay is the beſt, *(in ſome Caſes, but not always)* and moſt natural of all Cordials; beſides other Remedies may be provided, according to the Accidents which happen, by reaſon of the ſtaying behind of the Burthen, always endeavouring to bring it away as ſoon as poſſible; for as long as

it ſtays in the Womb, the Woman feels continually great Pains, almoſt like to them before her Child was born, although there remained but a ſmall Piece of it, and until the whole be voided, the Pains will ſtill be repeated, although in vain, unleſs the matter be well diſpoſed before: But the leſſer the Piece is of the Burthen retained, the more difficult oftentimes it is to be expelled; becauſe the Impulſes, which the Woman can make by helping her Throws, are not ſo great, when the matter contained in the Womb is ſmall, as when it is of a conſiderable Bigneſs; for then it is more ſtrongly thruſt and compreſſed; which is the reaſon why a Woman miſcarries with greater Difficulty, than when brought to Bed at her full time.

There are many Midwives, who having broken the Navel-ſtring, as † aboveſaid, leave their Work imperfect, and commit the reſt to Nature's Work; but very often the poor Woman dies, becauſe of the great Miſchiefs which happen uſually before the Suppuration of the Burthen ſo retained: To avoid which, as ſoon as they meet with the like Caſe, they muſt endeavour to fetch it away, according as we have directed; or if they find themſelves not capable of doing it, becauſe the Hand muſt be put up into the Womb, which is more properly the Work of a Chirurgeon expert in thoſe Caſes, let them preſently ſend for one, that ſo he may be yet able, before the Womb cloſeth, to introduce his Hand; for the longer it is deferred, the more difficult will be the Work.

† *This may happen to a good Midwife, but the Fault is when they do not diſcover it, that ſeaſonable Help may be applied.*

There are other Midwives bold enough to undertake this Operation, but for want of Induſtry, or neceſſary Knowledge, they cannot effect it, and leave the Woman oftentimes in a worſe Condition than if they had never meddled with it; as hapned about a Year or little more ſince to a poor Woman in the *Fauxbourgh* St. *Marcel*, whom I helped three Days after ſhe was delivered, being half gone, by a Mid-

wife

wife of the ſame *Fauxbourgh*, at the deſire of Mr. *Beſſier* a Chirurgeon, and my good Friend, who conducted and accompanied me to her, where I found her in continual Pain all over her Belly, which held her like Throws of another Travail, voiding black Humours extreamly ſtinking and offenſive, with which ſhe had alſo a great Pain in her Head, and a Fever, which in a ſhort time would without doubt have augmented, if I had not preſently fetched what remained: Wherefore having enquired of the Perſons preſent in her Chamber, how ſhe was delivered, and when; they told me not yet three whole Days, but that the Midewife not being able to fetch all, did only bring away ſome ſmall pieces of the Burthen, and told them, * that they need not be troubled at what remained, perſwading them always that it would come away of it ſelf, and that nothing more was needful but Patience. Truly ſhe was not ſo much to be blamed, for not having delivered this Woman, as ſhe was in not acquainting her that ſhe needed more help, when ſhe found that it was beyond her skill.

* *An excuſe of ſome of our Midwives, but not to be relied on.*

After this Information, having put up two of my Fingers into the *Vagina*, to underſtand the preſent Eſtate of things, I found the inward Orifice of her Womb almoſt quite cloſed, into which, however, I got my Fore-finger, where, by moving it to and again, without taking it away, by little and little I dilated her Orifice, ſo as to introduce another Finger, with which two alone, being not able to get in the reſt, I brought away three pieces of the After-birth of the bigneſs of a Walnut, which were left behind, taking them one after the other with my two Fingers, as Crabs do when they gripe any thing with one of their forked Claws; by which means in a ſmall time I delivered this Woman quite; who immediately after felt no more Pain, and recovered ſoon after: But otherwiſe ſhe had certainly been in danger of her Life, be-

cause of the great Corruption of what was left behind in the Womb: For that which I fetch'd away smelt so ill, that my Hands stank of it above two Days after, although I washed them three or four times with Vinegar.

This Chapter may suffice to show how one should behave himself in this Case. We will now teach what is fit to be done in each of the other Labours against Nature.

CHAP. XIV.

To deliver a Woman when the Child comes footling.

IT is an undoubted Truth, and well known to all such as lay Women, that the several unnatural Postures, wherein Children present themselves at their Birth, are the Cause of most of the bad Labours and ill Accidents there met with, for which, usually Recourse is had to Chirurgeons.

Now, since he is obliged very often, because of these ill Situations, to draw the Children forth by the Feet; I am therefore resolved, before I speak of the rest, (to most of which that must be a Guide) to show how a Child must be brought forth, which comes either with one or both Feet first.

Most Authors advise in this Case to change the Figure, and place the Head so, as it may present first to the Birth; but if they would show how it should be done, we might follow their Counsel, which is very difficult, if not altogether impossible to be performed, if we desire to avoid the Dangers, that by such violent Endeavours the Mother and Child must necessarily be put in; wherefore 'tis better to draw it forth by the Feet, when it comes Footling, than to venture a worse Accident by turning it.

* *That is, as soon as the Waters are broke.*

* As soon then 'as 'tis known the Child comes thus, and the Womb is open

open enough to admit the Chirurgeon's Hand into it, or else by anointing the Passages with Oil or Hogs-grease, to endeavour to dilate it by little and little, using to this purpose his Fingers, spreading them one from the other after they are together entred, and continuing so to do till it be sufficiently dilated; then, having his Nails well pared, and no Rings on his Fingers, his Hands well anointed with Oil or fresh Butter, as also the Woman placed after the manner as we have already often directed, let him gently introduce his Hand into the Entry of the Womb, where finding the Child's Feet, let him draw it forth in that Posture we shall now direct: But if it presents but one Foot, he should consider, whether the right or left, and in what fashion it comes; for these Reflections will easily inform him, on what side the other may be; which as soon as he knows, let him seek it, and gently draw it forth together with the first: But let him also be very careful that this second be not the Foot of another Child; for if so, he may sooner split both Mother and Children than draw them forth; which may easily be prevented, if having slided his Hand up the first Leg and Thigh to the Twist, he finds both Thighs joined together, and depending from one and the same Body: which is likewise the best means to find the other Foot, when it comes but with one.

All Authors, for fear of losing hold of the first Foot, advise to fasten a Ribban to it with a running Knot, that so it may not be sought a second time when the other is found: But that is not absolutely necessary, because usually when one hath hold of one, * the other is not far off: they that will may use this Precaution; but such as are expert, use it but seldom.

* *Not always.*

As soon then as the Chirurgeon hath found both the Child's Feet, he may draw them forth; holding them together, he may bring them by little and little in this manner, taking afterwards hold of the Legs and Thighs as soon as he can come at them, and drawing them so till the

the Hips be come forth: the whilſt let him obſerve to wrap the Parts in a ſingle Napkin, to the end that his Hands, being already greaſy, ſlide not on the Infant's Body, which is very ſlippery, becauſe of the viſcous Humours which are all over it, and hinder that one cannot take good hold of it; which being done, he may take good hold under the Hips, ſo to draw it forth, to the Beginning of the Breaſt, and then let him on both ſides with his Hand bring down the Arms along the Child's Body, which he may then eaſily find, and be careful that the Belly and Face be downwards, leſt being upwards, the Head be ſtopt by the Chin over the Share-bone; wherefore if it be not ſo, he muſt turn it to that Poſture; which is eaſily done, if taking hold on the Body, when the Breaſt and Arms are forth in the manner we have ſaid, he draws it, with turning it in proportion on that ſide which it moſt enclines to, till it be as it ſhould be; that is, with the Face downwards; and having brought it to the Shoulders, let him loſe no time, (deſiring the Woman at the ſame time to bear down) that ſo in drawing, the Head at that Inſtant may take its Place, and not be ſtopt in the Paſſage. Some Authors, to prevent this Inconvenience, adviſe that one Arm only ſhould be drawn forth, and the other left, to prevent the cloſing of the Womb on the Neck of the Child: This Reaſon is plauſible, yet if the Chirurgeon knows how to catch his Opportunity, he will not need this Shift to prevent this Accident, which may ſooner happen when one Arm is left above; for beſides that by its Bigneſs it would take up ſo much place, which is already too little, cauſing the Head to lean more on one ſide than the other, it will ſtop it certainly on that ſide where there is no Arm; and when I have ſometimes tried to deliver a Woman, leaving one of the Arms above with the Head, I could not do it till I fetched both Arms, and then I finiſhed my Operation with more Eaſe.

There

There are indeed ſome Children that have their Head ſo big, that when the whole Body is born, yet that ſtops in the Paſſage, notwithſtanding all the Care to prevent it: In this Caſe he muſt not endeavour only to draw forth the Child by the Shoulders, leſt he ſometimes ſeparates the Body from the Head, but he muſt diſengage it, by little and little, from the Bones in the Paſſage, with the Fingers of each Hand, ſliding them on each ſide oppoſite the one to the other, ſometimes above, and ſometimes under, until the Work be ended, endeavouring to diſpatch it as ſoon as poſſible, leſt the Child be ſuffocated; as it will certainly be, if he ſhould remain long in that Poſture; which being well and duly effected, he may ſoon after fetch the After-birth as above directed.

CHAP. XV.

How to fetch the Head when ſeparated from the Body, and it remains behind in the Womb.

NOtwithſtanding all the Care poſſible had in the fetching a Child by the Feet, yet ſometimes one meets them ſo putrify'd and corrupted, that with the leaſt pull the Body ſeparates from the Head, which remains alone in the Womb, and cannot be extracted but with Difficulty, foraſmuch as it is extreamly ſlippery, by reaſon of the place where it is, and of a round Figure, on which no hold can be taken. The Difficulty uſually met with upon the like Occaſion hath been ſo great, that ſometimes two or three Chirurgeons, one after the other, have forſaken the Operation, not being able to accompliſh it, after all their Induſtry and Strength in vain employ'd, ſo that neceſſarily the Death of the Woman enſued; but I am of Opinion, they had eſcaped this Misfortune, if they had done what I ſhall now direct.

When

When then the Infant's Head, separated from its Body, remains alone behind, whether becauſe of Putrifaction or otherwiſe, let the Chirurgeon immediately, without Delay, whilſt the Womb is yet open, direct up his right hand, to find the Mouth of this Head (for there is then no other hold) and having found it, let him put one or two of his Fingers into it, and his Thumb under the Chin, and then, by little and little, let him draw it, holding it ſo by the Jaw; but if that fails, as it often will when putrify'd, then let him pull forth his right Hand, and ſlide up his left, with which he muſt ſupport the Head, and with the right let him take a narrow Crochet, but ſtrong, and with a ſingle Branch, which he muſt guide along the Inſide of his other Hand, keeping the Point of it towards it, for fear of hurting the Womb; and having thus introduc'd it, let him turn it towards the Head, for to ſtrike it into either an Eye-hole or the Hole of an Ear, or behind the Head, or elſe between the Sutures, as he finds it moſt eaſy and convenient, and then draw forth the Head ſo faſtened with the Crochet, ſtill helping to conduct it with his left Hand; but when he hath brought it near the Paſſage, being ſtrongly faſtned to the Crochet, (as is already directed in one of the mentioned Places) let him remember to draw forth his Hand, that the Paſſage being not filled with it, may be the larger and eaſier, keeping ſtill a Finger or two on the ſide of the Head, the better to diſengage it.

* *Doubtful Expedient.*

You may try for the ſame purpoſe an * Expedient (which appears to me very ingenious) and (thinking on this Subject) came lately into my Mind, by which, without doubt, one may effect this painful and laborious Operation, without tormenting the Woman ſo much as ſhe is, when either the Crochet or crooked Knife are uſed; which is a ſoft Fillet, or Linnen Slip, of the Breadth of four Fingers, and the Length of three Quarters of an Ell, or thereabouts, then taking the

the two Ends with the left hand, and the Middle with the right, let him ſo put it up with his right, as that it may be beyond the Head to embrace it, as a Sling doth a Stone, and afterwards drawing the Fillet by the two Ends together, it will eaſily be drawn forth, the Fillet not hindering in the leaſt the Paſſage, becauſe it takes up little or no place.

But if the Chirurgeon cannot by either of theſe different means draw forth the Head, becauſe 'tis too big, he will be neceſſitated (if he will finiſh his Work) to leſſen it with a crooked Knife, marked C, in the Repreſentations of the Inſtruments at the End of the 2*d* Book. For to do this, let him ſlide up his left hand into the Womb, and with his right guide up the Knife, always obſerving that the Point be turned towards the inſide of the left hand, for fear of hurting the Womb, and afterwards let him turn * it to the *Sutures* of the Head, and chiefly the *Crown*, where he muſt make the Inciſion with this Inſtrument, that having ſeparated ſome Pieces, he may the eaſier draw forth the Head, or at leaſt having empty'd ſome part of the Brain, by the Orifice ſo made, the Bigneſs of the Head will be much diminiſhed by it, and conſequently the Extraction of it leſs painful.

* *A dangerous Operation, not raſhly to be undertaken.*

The left Hand being thus in the Womb, will be very uſeful to help, ſtriking the Knife into the Head, for to divide and ſeparate its parts, as the Chirurgeon judges neceſſary, as alſo to hinder (by Inadvertency) the Womb's receiving hurt; and the right without, for to hold the handle of this Inſtrument, which therefore muſt be long enough, and will ſerve him to move and guide it on which ſide he pleaſeth; in turning, thruſting, drawing, or ſlanting it, as the Caſe requires. *Ambroſe Paré* and *Guillemeau* would have this Knife to be ſo ſhort, as to be hid in the right hand, for to do the Operation, after it is ſo introduced into the Womb; but it is certain, that when it is filled with a monſtrous Child, or a Head, as aboveſaid, the Chirurgeon's

rurgeon's Hand will be so pressed in the Womb, that it will be very difficult for him to use it skilfully with one hand alone, and do no Violence to the Womb; which is the reason why (if I may be credited) this Instrument ought to have a long Handle, that being introduced into the Womb, it may be conducted to do the Operation with the left hand within, as we have mentioned, and governed by the right which holds the Handle of it without, which ought to be as long as the Handle of an ordinary Crochet. They that will take the Pains to conceive my Arguments, and try this Instrument when they have occasion, will confess it to be much more useful and commodious, being thus long, than so short as the said *Paré* and *Guillemeau* recommend. For my part, having caused one to be made of that Fashion, I found it very convenient when I had the like Occasion to use it.

Now when the Head is thus fetch'd out of the Womb, care must be taken, that not the least part of it be left behind, as also to cleanse the Woman well of her After-birth, if yet remaining. But a Question of great Consequence, and much to the purpose may be here started, Whether the Child's Head yet remaining so in the Womb, and the Burden also, the Head ought to be extracted before the Burden? To which may be answered with Distinction, that if the Burden be wholly separated from the sides of the Womb, it ought to be first brought away; because it may hinder the taking hold of the Head; but if it be still adhering, it must not be meddled with till the Head be brought away: For if one should then go about to separate it from the Womb, it would cause a flooding, which would be augmented by the Violence of the *Operation*; for the Vessels to which it is joined, remain for the most part open, as long as the Womb is distended, which the Head causeth whilst it is retained in it, and cannot close till this strange Body be voided, and then it doth by contracting and compressing it self together, as I have heretofore more exactly explained: Besides, the

the After-birth remaining thus cleaving to the Womb during the Operation, prevents it from receiving easily either Bruise or Hurt. This Instruction may suffice for this Chapter, let us pass to the rest.

CHAP. XVI.

How to help a Woman in her Labour, when the Child's Head thrusts the Neck of the Womb forth before it.

IF we only respect the Figure the Child comes in, in this Labour, we may say it is natural: But when we consider the Disposition of the Womb, which is in danger of coming quite forth of the Passage; or the Extraction of the Infant, we shall find it not so altogether, for its Head thrusting it forcibly before it, may easily cause a falling out of the Womb, if the Woman be not skilfully succoured in time: Here may be seen the *Vagina* or Neck of the Womb bear forth in great Wrinkles, according as the Child advanceth.

Women troubled with a bearing down of the Womb before they conceive, and whose Womb is very moist, are much subject to this Accident; because of the Relaxation of the Ligaments. The same Method we have taught in the natural Travail must not now be observed; for in this case the Woman must neither walk, nor stand upright, but keep her Bed, with her Body equally at least situated, and not raised a little, as is requisite in a natural Labour,: She must by no means use strong or sharp Clysters, lest they excite to great Throws, neither so much humect the Womb, which is already too much relaxed; but to aid her at the Moment each Pain takes her, when the Child begins to advance his Head, and consequently the Neck of the Womb, let the Midwife keep her Hands on each side of the Head, to thrust back, by resisting the Woman's Pains, the Womb only giving way in the mean

mean time for the Child to advance, doing the like at every Throw, continuing it till the Woman of her ſelf hath forced the Child quite into the World: For one muſt by no means draw it by the Head, as is mentioned in the natural Labour, for fear of cauſing the Womb to fall out at the ſame time, to which it is then very apt.

If notwithſtanding the Infant having the Head born, and yet ſtops there, ſo long as to endanger its Suffocation, then the Midwife muſt call a ſecond Perſon to her Aſſiſtance, to draw it gently forth by the Head, whilſt ſhe keeps back the Womb with both her Hands, to prevent its following the Infants Body ſo drawn forth. After the Woman is thus delivered, her Afterbirth muſt be fetch'd as is above directed, being ſtill careful for the ſame reaſon not to ſhake or draw it forth too rudely, and then let it be plac'd up in its natural Situation, if it bears down.

The

CHAP. XVII.

How to fetch a Child, when coming right it cannot paſs, either becauſe it is too big, or the Paſſages cannot be ſufficiently dilated.

THERE are ſome Women, whoſe Children (notwithſtanding they come right) remain ſometimes four, five, or ſix whole Days in the Paſſage, and would continue there longer, if they were left alone, without being able to be born, unleſs aſſiſted by Art; to which we are oblig'd, if we deſire to ſave the Mother's Life: this happens oftneſt to little Women of their firſt Children, and chiefly if a little too much in Years, becauſe their Womb being very dry, cannot be ſo eaſily dilated as others, who already have had Children, or are not ſo old. When this happens, after the Chirurgeon hath done his endeavour to relax and dilate the Parts, to facilitate the Child's Birth, and that he finds all in vain, becauſe the Head is much bigger than it ſhould be, and that beſides it is certainly dead (as it for the moſt part is, when it hath continu'd four or five days in this Condition, after the Waters are broke) which he may be more exactly aſſur'd of by the Signs already deſcrib'd in the 12th Chapter of this Book, * he need then make no ſcruple to faſten a Crotchet to ſome part of the Child's Head, and rather about the hinder part than any other, to draw it forth by this means directly, if poſſible; if not, let him make an Inciſion with a ſtreight or little crooked Knife, which is beſt, about the *Sutures*, to empty thence ſome of the Brains, and ſo leſſen the bigneſs

* *This may be conniv'd at when the Child is dead; but becauſe the moſt careful may oft-times be miſtaken, it cannot be approv'd of, as appears in the Tranſlator's Epiſtle to the Reader.*

of this Head, and immediately after fix his Crotchet faſt to the Skull in the ſame place, whereby he will eaſily extract the Infant.

It is very certain when the Child is dead, one ought to do according to my Direction, to ſave the Mother's Life: but it is a very great * Queſtion, Whether a live Child ought to be ſo dealt with to ſave the Mother's Life, after there is no more hopes that it can be born any otherways, becauſe of the narrowneſs of the Paſſage, which cannot poſſibly be ſufficiently dilated for its Birth; or whether one ought to defer the Operation, until there is a perfect Aſſurance that 'tis dead? In this caſe I am apt to believe, that ſince the Infant cannot avoid Death neither one way nor the other (for ſtaying in the Paſſage, without being able to be born, it muſt die, and being drawn forth by Crotchets it is kill'd) one muſt and ought to fetch it out alive or dead, as ſoon as there is Opportunity to do it, and when all hope is loſt that it can come any otherways, thereby to prevent the Mother's Death, which could by no other means be avoided. *Tertullian* (as *Riolanus* very well notes in his 38th Chapter of the 12th Book of his *Anatomical Manual*) ſaith upon this Subject, "That it is a "neceſſary Cruelty to kill the Child in this Caſe, ra-"ther than to ſave it from the danger it is in of "Dying, and ſo certainly cauſe the Mother's Death. Notwithſtanding this muſt not always be put in practice by the Chirurgeon, but in ſuch an extremity, and then he may do the Work as dextrouſly as he can. For my part I had rather do this in the like occaſion, than reſolve upon that Cruelty and Barbarouſneſs of the *Cæſarean* Section, in which 'tis abſolutely impoſſible (tho' many Impoſtors, whom *Rouſſet* favours, aſſure the contrary) that a Woman ſhould ever eſcape, as I ſhall make more particularly appear hereafter,

* *This Queſtion is out of doors, for the reaſon given in the foreſaid Epiſtle.*

after, when I come to it; for by this Operation I can save the Mother, who would perish with the Child: And as it is always better of two Evils to choose the least, so we ought always to prefer the Mother's Life before the Child's *.

* *This Chapter might be very well spar'd, if every Practitioner had the Art the Translator professeth in his Epistle, of fetching a Child, when it comes right, without Hooks, or turning it.*

CHAP. XVIII.

How to deliver a Woman when the Child presents the Side of the Head to the Birth, or the Face.

WHEN the Child presents the Side of the Head, tho' it seems a natural Labour, because the Head comes first, yet 'tis very dangerous both to Child and Mother, for he shall sooner break his Neck, than ever be born in that Fashion; and by how much the Mother's Pains continue to bear him, which is impossible unless the Head be first right plac'd, the more the Passages are stopt up.

† Therefore as soon as it is known, the Woman must be laid with all speed, lest the Child advancing further in this vicious Posture, it prove more difficult to thrust him back, which must be done when we would place the Head right in the Passage, as it truly and naturally should be.

† *A good Note; for tho' some possibly, not unlike this Birth, may in time be born, yet 'tis for the most part dangerous delaying it, because many Children, and some Women, have been so lost.*

For to effect this, place the Woman that her Hips be a little higher than her Head and Shoulders, causing her to lean a little upon the opposite Side to the Child's ill Posture; then let the Chirurgeon slide up his Hand, well anointed with Oil, by the Side of the

Child's Head, to bring it right, gently with his Fingers between the Head and the Womb; but if the Head be so engag'd that it cannot be easily done that way, he must then put his Hand up to its Shoulders, that so by thrusting them back a little in the Womb, sometimes on the one side, and sometimes the other, as he sees occasion, he may give it a natural and convenient Position.

It were to be wish'd that the Chirurgeon could put back the Infant by the Shoulders with both his Hands in this manner; but the Head doth then take up so much room, that he hath much ado to introduce but one, with which he must do his Operation, with the Help of the Fingers ends of the other Hand put up as far as necessary: afterwards let him excite and procure the Child's Birth, as directed in the natural Labour.

At other times a Child comes with the Face first, having its Head turn'd back, in which Posture it is very difficult it should be born; and if it remain so long, the Face will be so black, and blue, and swell'd, that at the first sight it will appear monstrous: which comes as well by the Compression of it in that Place, as by the Midwife's Fingers handling it too rudely, when she would place it in a better Posture.

I remember about six Years ago, in the like Case, a Woman whose Child came with the Face so black and mishapen as soon as it was born (as usually in such Cases) that it look'd like a Blackamoor, however I deliver'd her of it alive: as soon as the Mother saw it, she told me, that she always fear'd her Child would be so monstrous; because when she was young with Child of it, she fix'd her Looks very much upon a Blackamoor belonging to the Duke of *Guise*, who always kept several of them: wherefore she wish'd that, or at least car'd not tho' it died, rather than to behold a Child so disfigur'd, as it then appear'd. But she soon chang'd her Mind, when I satisfy'd her that this

this Blackneſs was only becauſe it came Faceling, and that aſſuredly in three or four days it would wear away: as it hapned, having often anointed it with Oil of ſweet Almonds by expreſſion, and when I ſaw the Child about a Year after, methought I had not ſeen a fairer. Now to deliver this Birth, the ſame manner, as when the Child comes with the Side of the Head, muſt be obſerv'd, being careful to work gently, to avoid as much as may be the bruiſing of the Face.

CHAP. XIX.

How to deliver a Woman when the Head of the Child is born, and the Womb cloſeth about the Neck.

THE Child comes naturally with the Head firſt, becauſe that by the Hardneſs and Bigneſs of it, the Paſſage might be the better made and open'd for the other Parts of the Body, which uſually paſs afterwards without Pain: but notwithſtanding ſometimes the Head is ſo ſmall, and the Shoulders ſo large, that without a very great difficulty they cannot paſs; which makes the Child remain often in the Paſſage after the Head is born. This Accident may likewiſe happen ſometimes, having not been careful, but loſing time in drawing forth the Child by the Head, as directed in the Diſcourſe of natural Labours, to the end the Shoulders might at the ſame inſtant ſucceed in the Place the Head poſſeſt.

When the Chirurgeon meets with this Caſe, he muſt ſpeedily deliver the Child out of this Priſon, or rather this Collar in which he is caught; for a ſmall delay may there ſtrangle the Child: to avoid which, let him endeavour to cauſe the Shoulders to follow, by gently drawing its Head, ſometimes by the Sides

of it, ſometimes with one Hand under the Chin, the other behind the Head, and ſo doing by turns on the one ſide and the other, to facilitate the Operation the better, being very careful the Navel-ſtring be not entangled about the Neck; as alſo not to draw it forth with too much Violence, for fear, leſt it may happen as I once ſaw, the Head be pull'd from the Shoulders. If the Shoulders paſs not with gentle pulling, ſlide up your Fingers on both ſides under the Armpits, with which turning them inwards, you may by little and little draw forth the Shoulders; but when they are in the Paſſage, and totally diſingag'd, if he cannot then draw the reſt forth, ſtill keeping his Fingers under the Arm pits, he may be confident there is ſome other hindrance, and that it is certainly monſtrous in ſome part of its Body; or, as it for the moſt part happens in this Caſe, that it is Hydropical in the Belly, for which cauſe it is impoſſible it ſhould be born, before the Belly be pierc'd to evacuate the Waters, and then 'twill eaſily be accompliſh'd, as I have done in the like Caſe, of which I will give you the Particulars, and how we behav'd our ſelves; for we were two Chirurgeons, one Midwife and a Deputy, belonging to the *l' Hoſtel de Dieu*, to do the Work.

In the year 1660, whilſt I practis'd Midwifery in that Hoſpital, it happen'd that the Deputy had a Woman whoſe Child ſhe could not poſſibly bring into the World further than its Head, where it ſo remain'd; and ſeeing ſhe could not after all her Endeavours finiſh the Work, ſhe call'd the Midwife of the Place to her Aid, which was then Madam *de France*, who likewiſe us'd her utmoſt Skill, but in vain: and when they were both thus tir'd in pulling the Head (ſo as the *Vertebra's* of the Neck were ſeparated, and that it hung only by a little of the Skin) I came in the interim, at which time they deſir'd me to examine the Buſineſs, and to find the Cauſe why the Child could

could not be drawn forth with all their Strength, which was sufficient to have drawn forth the Shoulders, if they had been as big again as they were; which having consider'd, I immediately conceiv'd the difficulty to proceed from something else: wherefore I put my Hand into the Womb, up to the Child's Shoulders, which seem'd not too big to pass with ease, therefore I concluded that the hindrance was not there. After that I put my Hand further up, directing it all along his Breast, at the bottom of which, near the Grisle *Ziphoide*, I found his Belly hydropical and full of Water, so that it was impossible ever to deliver the Woman, until the Water was emptied by piercing the Belly: but there wanting a fit Instrument for that purpose, I immediately sent to advertise one of the Chirurgeons of the same Hospital, to whom I declar'd the Case as I found it, adding withal, that the Child could not be born, unless an Orifice was made to empty the Belly: but he would by no means follow my Opinion, whether it was out of Policy, believing it may be, that he very well understood his Business without needing my Advice, or that he would not or could not believe the Child to be hydropical, as I inform'd him; wherefore he contented himself, without an exact examination of the Case, to endeavour only the extraction of it after his manner: and to effect it, he immediately pull'd and separated the Head wholly from the Body, which hung then but by a Skin, because the Midwives, as I said before, had pull'd it with so much Violence. Afterwards with his Crotchets he pull'd away both the Arms, and some of the Ribs, part of the Lungs and the Heart, one piece after another for above three quarters of an hour, that he was very wet with Sweat, altho' it were cold Weather; and having thus tir'd both his Mind and Body, he was constrain'd to quit the Work, to rest a while, leaving the Midwife to endeavour what she could the whilst, who wea-

ry'd her self also in vain, as well as he had done, by pulling some of the Child's Ribs with her Hands only (* for it is not a Midwife's Work to use Crotchets.) After this he returns the second time with all his strength to the Work, without effecting any more, because he had not yet open'd the lower Belly, nor the *Diaphragma*, nor would not, as I advis'd him every moment, without which it was absolutely impossible to draw forth the rest of the Body.

* *Tho' some here in* England *blindly adventure on the use of them, to the loss of many Lives, which cannot be approv'd, for the reason given in the Translator's Epistle to the Reader.*

When he saw that his second Endeavours were as ineffectual as his first, he gave me at length his Crotchet, telling me that I might weary my self as well as the others, which I willingly and with Joy accepted (for I was very certain I could finish the Operation) knowing very well, that instead of amusing my self, as they had done, about pulling of it, I ought only to pierce the Infant's Belly to let out the Waters, after which all the rest would very easily follow. For which purpose I put up my left Hand into the Womb, just at the right Side of the swell'd Belly, and then with my right Hand I guided the Crotchet (like to that mark'd *A*, amongst the representation of the Instruments at the end of this second Book, instead of which it were better to use the crooked Knife, mark'd there C) along my left Hand into the Womb; and then I turn'd the Point of it towards the Infant's Belly, in which I struck it, so that I made a Hole big enough to receive two of my Fingers ends (which I put into it after it was in the World) and then stretching it a little, all the Waters were immediately emptied; so that with one Hand I easily drew forth the rest of the Body, to the Astonishment of this Chirurgeon, whom I could never persuade that the Infant was so full of the Dropsy.

After

After it was thus drawn forth, I had the Curiosity to fill up the Belly with Water, by the Hole I had made, to the end we might see what quantity of Water had been there contain'd, and of what bigness it might be when fill'd. I pour'd in, without lying, above five Quarts, which I should hardly have believ'd, if I had not seen it my self; and when the Belly was fill'd with Water, it was of the Bigness and Figure of a very great Football. I have set down here all the Circumstances of this History, that the Chirurgeon may know how to behave himself on the like occasion.

CHAP. XX.

How to help a Woman when the Child comes with one or both Hands together with the Head.

FOR the most part when an Infant presents any part of his Body together with the Head, it is usually one or both the Hands, rather than any other, which hinders its Birth; because the Hands take up part of the Passage, and for the most part they cause the Head to lean on one side. When the Child comes thus, it is quite contrary to Nature.

To remedy this, as soon as 'tis perceiv'd that one Hand presents together with the Head, it must be prevented from coming down more, or ingaging further in the Passage; wherefore the Chirurgeon having plac'd the Woman on the Bed, with her Head a little lower than her Hips, must put and guide back the Infant's Hand with his own, as much as may be; or both of them, if they both come down, to give way to the Child's Head: which having done, if the Child's Head be on one side, it must be brought into its natural Posture in the middle of the Passage, that it

it may come in a ſtrait Line, proceeding further as I have directed before in the 18th Chapter of this Book, which treats of the Child's Head coming on one ſide.

CHAP. XXI.

How to deliver a Woman when the Child preſents one or both Hands foremoſt, without any other Part.

WHEN an Infant preſents only one or both Hands to the Birth, or an Arm ſometimes out to the Elbow, and many times to the Shoulder, it is one of the worſt and moſt dangerous Poſtures a Child can come in, as well for himſelf as for his Mother; becauſe of the violent force the Chirurgeon is * always oblig'd to uſe both to the one and the other in ſearching for the Feet, which are very far off, by which he muſt always in theſe Caſes, turn and draw him forth; which will often make him ſweat in the midſt of Winter, becauſe of the difficulty in this Labour more than in all the reſt, tho' ſome others of them indeed are more dangerous for the Infant; as when it preſents the Belly, and the Navel-ſtring comes forth: but not ſo painful for the Chirurgeon, becauſe the Feet of the Infant being near the Paſſage, and not ſo hard to be found, as when he comes with a Hand; for then they are high, at the very bottom ſometimes of the Womb, where he muſt ſeek them, to turn and draw it forth, as I am going to direct.

* *Not always, tho' oftentimes.*

When therefore it preſents with one Hand only, or a whole Arm firſt, it muſt by no means be pull'd forth by that part; for the Member will ſooner be ſeparated and rent from the Body, than the Child ſo brought forth, by reaſon the Child is pluck'd obliquely and croſs.

croſs. And when both Arms preſent, if pluck'd together, there would not be place for the Head to paſs which would by that means be turn'd quite back. Wherefore having plac'd the Woman as is requiſite, || one muſt put back the Infant's Hand or Arm, which comes forth into the Womb again. Some Midwives dip it in cold Water, or touch it with a wet Cloth, ſaying, that the Infant will preſently draw it in, if he be living; but he is uſually ſo preſt and engag'd in the Paſſage, by this bad Poſture, that he hath not liberty enough to draw back his Hands ſo eaſily, being once come forth: wherefore the Chirurgeon muſt guide them back † with his own, which he muſt afterwards ſlide into the Womb, under the Child's Breaſt and Belly, ſo far till he finds the Feet, which he muſt gently pull towards him, to turn and draw it forth by them, as hath been already directed; obſerving to do it with as little Violence as may be, which is much more eaſy, ſure and ſafe, than to buſy ones ſelf in putting it into a natural Situation.

|| *Not the beſt way, and cutting it off is worſe.*

† *Better let alone.*

As ſoon as he ſhall have ſo turn'd the Child by the Feet, if he hath hold but of one, he muſt ſearch for the other, that ſo he may bring it to the firſt; when holding them both, he muſt govern himſelf afterwards in the bringing the Child, as we have formerly ſhew'd in the fourteenth Chapter of the ſecond Book, ſpeaking of thoſe Labours where the Feet come firſt: but if the Arm be ſo far advanc'd (almoſt to the Shoulder *) and ſo big and ſwell'd († as it happens when it hath been a long time forth) that it cannot at all, or without great difficulty, be reduc'd. *Ambroſe Pareé* in this caſe || directs (provided the Child be certainly dead) to cut off that Arm as high as

* *Which ſeldom is, unleſs an ignorant Midwife tamper with it.*

† *The fault of the Midwife for not ſending as ſoon as ſhe diſcovers it to come ſo.*

|| *Good if the Child be*

be dead; but since it may always be done without, not good to delay the Operation, indangering the Woman till the Child be dead.

as may be, first making an Incision round the Flesh, and then cutting off the Bone a little higher, with a pair of sharp Pincers, that so the Flesh may be left longer to cover the sharpness and end of the Bone, to prevent hurting the Womb, when the Infant is turn'd, to draw it afterwards forth by the Feet as it should be. Notwithstanding, if the Chirurgeon, not being able to put it back, is absolutely constrain'd to cut it off (which must not be done but in such extremity) he may effect it without so much Ceremony, by * twisting it twice or thrice about: for by reason of its Tenderness he will easily separate it from the Body, just in the Joint of the Shoulder with the Shoulder-blade, by which means he will neither need sharp Pincers nor other Instruments to cut the Bones and Flesh, as the said *Paree* teacheth; neither will there remain any sharpness, by reason the Separation will be just in the Joint.

* *This much the better way.*

But above all, when the dismembring of an Infant is thus intended, or to draw it forth with a Crotchet, † let the Chirurgeon take great care that he be not deceiv'd, well considering, whether it be assuredly dead; and not to operate on this wise, unless he be very certain of it, by all the Signs mention'd in the twelfth Chapter of this Book. For what a horrible Spectacle would it be, to bring (as some have sometimes done) a poor Child yet living, after the Arm hath been cut off, or any other part of the Body? wherefore let him make a double Reflection on his Work, before he goeth about it.

† *This Caveat unnecessary to those who understand the Art aright.*

CHAP.

CHAP. XXII.

How to deliver a Woman when Hands and Feet come together.

IF the Infant presents both Hands and Feet together at the Birth, it is altogether impossible it should be born so: the Chirurgeon therefore guiding his Hand towards the Orifice of the Womb, will perceive nothing but a many Fingers close together; and if it be not sufficiently dilated, he will be a good while before he can exactly distinguish between the Hands and Feet, by reason they are sometimes so shut and prest together, that they seem to be all of one and the same shape: but when the Womb is open enough to introduce the Hand into it, he will easily know which are the Hands, and which the Feet; and having well taken notice of it, let him slide his Hand, and presently direct it towards the Infant's Breast, which he will find very near, and by that || let him gently thrust back the Body towards the bottom of the Womb, leaving the Feet in the same place where he found them. Having therefore plac'd the Woman in a convenient Posture, that is, her Hips a little rais'd above her Breast and Head, which Situation ought always to be observ'd when the Child is to be put back into the Womb, let him afterwards take hold of him by the Feet, and draw him forth according to the way before directed in its proper Chapter.

|| *Unnecessary.*

This Labour truly is a little troublesome, but nothing near so much as that we have mention'd in the preceding Chapter, where the Child presents only his Hands; for in that the Feet must be search'd a great way off, and it must be quite turn'd about, before

fore it can be drawn forth. But in this, they are ready, presenting themselves; and there is not much to do, but to lift and thrust back a little the upper part of the Body, which is almost done of it self * by drawing it alone by the Feet.

* *Sufficient, and the best way in this Birth.*

Those Authors that have written of Labours, and never practis'd them, as many Physicians have done, do order all by the same Precept often reiterated, that is, to reduce all wrong Births to a natural Figure; which is, to turn it, that it may come with the Head first: but if they themselves had ever had the least Experience, they would know that it is very often impossible; at least if it were to be done by the Excess of Violence, that must necessarily be us'd to effect it, it would go near to destroy both Mother and Child in the Operation: A *Fiat* in this Case is soon said and order'd; but it is not so easily executed as pronounc'd. For my part I am of an Opinion clear contrary to theirs; and such as are skilful in the Art will surely agree with me in it, that is, that (whensoever the Infant comes wrong, in what Posture soever, from the Shoulders to the Feet) it is † the best way, and soonest done, to draw it forth by the Feet; searching for them, if they do not present themselves, rather than to try to put it into a natural Posture, and place the Head foremost: for the great Endeavours often necessary to be us'd in turning the Infant in the Womb, (which is a little harder than to turn a Pancake in a Frying-pan) doth so weaken both Mother and Child, that there remains not afterwards Strength enough to commit the Operation to the Work of Nature; and usually the Woman hath no more Throws nor Pains fit for Labour, after she hath been so wrought upon: for which Cause it would be very tedious and difficult, as also the Infant, which is already very weak, would certainly perish

† *A good Note.*

riſh in the Paſſage, without being able to be born. Wherefore it is much better in theſe caſes, immediately to fetch it by the Feet, ſearching for them, as I have already directed, when they do not preſent themſelves: by which a tedious Labour will be prevented to the Mother, and the Child will be often brought alive, who without it will ſcarce eſcape Death, before he can be brought forth by the Strength of Nature.

CHAP. XXIII.

How to deliver a Woman when the Child comes with the Knees.

WHEN an Infant (not being turn'd towards the latter Months, as he ought, to come with his Head foremoſt, as is mention'd in the fifth Chapter of this Book) preſents the Knees to the Birth, having the Legs folded towards the Buttocks, one may eaſily be deceiv'd touching but one of them, becauſe of their Hardneſs and Roundneſs; and take it for the Head, eſpecially when being ſituated a little high, it can be reach'd but with the end of a Finger only: but if it be touch'd and handl'd a little better, the Infant being fallen a little lower, it will eaſily be diſtinguiſh'd.

As ſoon then as it is perceiv'd, it muſt not be ſuffer'd to advance further in this Poſture: but having plac'd the Woman, the Knees muſt gently be put back, to have the more Liberty to unfold the Legs one after the other; which the Chirurgeon may do, by putting one or two of his Fingers under the Ham, directing them by little and little all along behind the Leg, until he meets the Foot, and drawing always a little obliquely, to come the eaſier to the end of it, that

that ſo having diſengag'd one, he may do the ſame to the other, proceeding in the ſame manner as with the firſt. After which, having brought them together, he may finiſh the Work, as when a Child comes footling; always obſerving to bring the Face of it downward, and ſuch Circumſtances as are noted where we treat of that Labour.

CHAP. XXIV.

Of a Delivery when the Child comes with Shoulder, Back, or Breaſt.

THE moſt difficult of theſe three ſorts of Figures and Situations, in which Infants ſometimes come, is that of the Shoulders; becauſe it is furtheſt from the Feet of the Infant, and the Chirurgeon muſt find them to draw it forth. The next is the Back: and the Breech, for the ſame reaſon, cauſeth leaſt trouble, not only becauſe the Feet are nearer, but alſo becauſe by this Figure the Head and Neck of the Infant is not ſo conſtrain'd and lockt, as in the other Situations.

For to remedy this Birth of the Shoulder, ſome adviſe that it ſhould be put back, to make way for the Head of the Infant, that ſo it may be reduc'd to a natural Birth: but it is much better, for the Reaſons above alledg'd in Chap. 22. of this Book, to try to bring it by the Feet. To effect which, the Chirurgeon muſt thruſt the Shoulder a little back with his Hand, that ſo he may have more liberty to introduce it into the Womb: and ſliding it then along the Child's Body, either by the Belly or Side, as he finds it eaſieſt, he ſhall fetch the Feet, and turning it, bring them to the Paſſage; and ſo deliver the Woman, as is already directed.

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If it be the Back which presents to the Birth, it is also impossible to be born in that Posture, what Pains soever the Mother endures; and besides, the Child having the Body folded inwards, and almost double, his Breast and Belly are so prest together, that he usually wants little of being suffocated: To avoid which, the Chirurgeon must quickly slide up his Hand along the Back towards the inferior Parts, until he meets the Feet, to bring it forth the same way as if it came footling.

But when the Child comes with the Breech, if it be small, and the Mother big, having the Passages very large, he may, sometimes, with a little help, be born so; for tho' he comes double, yet the Thighs being folded towards the Belly, which is soft and gives way, it passeth without much trouble. As soon as the Chirurgeon finds the Child to come with the Buttocks foremost, he must not permit it to engage lower in the Passage; for it will not come so, unless it be very small, and the Passage very large, as we have already said. This being then in good time perceiv'd, he must, if he can, thrust back the Breech; and sliding up his Hand along the Thighs, to the Legs and Feet of the Child, he must bring them gently one after another, forth of the Womb, by folding, stretching, wagging, and drawing them gently towards the side, being careful not to wind them too much, or cause a Dislocation: And then let him draw forth the rest of the Body, as if it came with the Feet foremost.

I have said, that the Chirurgeon, perceiving the Child to come with the Breech foremost, ought to put it back if he can; for sometimes he will be advanc'd so forward in the Passage, that you may sooner destroy both Mother and Child, than reduce it back, when once strongly engag'd. When this happens, he cannot hinder it from coming in this Posture, in which his Belly is so press'd, that he

often voids the * *Meconium* by his Fundament. However, he may much help this Birth, by sliding up one or two Fingers of each Hand on each side of the Buttocks, to introduce them into the Groins; and having crook'd them inward, he must draw the Breech just out to the Thighs: and then by drawing and wagging it from side to side, he will disengage them from the Passage, as also the Feet and Legs one after the other, being careful of dislocating any part; and then he may extract the rest as before, when coming with the Feet. The first Woman I ever laid, was of a Child which I drew † thus forth with the Buttocks foremost, being constrain'd to it, because as soon as ever the Waters broke (which happen'd before I could arrive to hinder it) they were so forward, that it was impossible to do it otherwise: which I perform'd very well, and in short time, without Prejudice to the Mother or Child, doing as I have directed.

* *Child's Ordure.*

† *This way ought to be avoided if possible.*

CHAP. XXV.

Of those Births wherein the Infant presents Belly, Breast, or Side.

THE Back-bone may easily be bent and turn'd forwards a little, but by no means backwards, without excessive Violence. Wherefore the worst and most dangerous Figure that a Child can offer in the Womb to the Birth, is the Belly or the Breast; for then its Body is constrain'd to bend backwards: And whatever Throws or Endeavours the Woman makes to bring it forth, it will never be accomplish'd; for she will sooner perish with her Child, than ever advance it in this Posture into the Passage: Wherefore it is in great danger, if not timely succour'd. And

in

in case it should escape; which would be very strange, it would be a long while after its Birth weak in the Back. But that which augments the danger much more, is, that for the most part the Navel-string comes forth when the Child comes with the Belly. Therefore as soon as it is discover'd to be so, the Chirurgeon must apply the sole Remedy of drawing it forth by the Feet as speedily as may be, in the following manner.

Having plac'd the Woman, let him gently slide up his flat Hand (being well anointed for the easier entrance) towards the middle of the Child's Breast, which he must thrust back, to turn it. This Situation being already half alter'd, the Feet being as near to the Passage as the Head, when it presents the middle of the Belly; then he must slip up his Hand under the Belly till he finds the Feet, which he must bring to the Passage, to draw it forth in the same manner as if it had come footling; being careful to keep the Breast and Face downwards, which must always be observ'd before the Head can be drawn forth, for the Reasons often already given, which must never be forgotten.

When a Child comes with Breast or Belly, the Chirurgeon must always proceed the same way in both, seeing they require the same Circumstances. An Infant may likewise come with the Side, which way it is as impossible to pass as the two former: But it is not so much tormented, nor is the Situation so cruel; for it may remain in it a longer time without dying, than in the two former, wherein it is much more rack'd than in this, in which the Body may be bent forward, and not backward, as in the other; neither doth the Navel-string come forth so easy, as when it comes with the Belly first. In this, as in the other two Births, the Chirurgeon must draw the Child forth by the Feet, on this fashion: Having plac'd the Woman as she ought to be, he may push back a little with his Hand the Infant's Body, the better to introduce it, which

he may ſlide along the Thighs, till he finds the Legs and Feet, by which he muſt turn it, and afterwards draw it forth, juſt in the ſame manner as before, with the ſame Obſervations. Nor ought he to amuſe himſelf in any of theſe three Births, to place the Head right, that it might come naturally; becauſe it is in great danger of dying in theſe unnatural Poſitions, if not drawn forth with ſpeed; which can never be effected, unleſs it be by finding thee Feet, as I have directed.

CHAP. XXVI.

Of Labours wherein ſeveral Children preſent together in the different Poſtures above-named.

IF all the unnatural Figures and Situations which we have hitherto deſcrib'd, that a ſingle Child may come in, do cauſe thoſe many Difficulties and Dangers mention'd; ſurely the Labour wherein ſeveral together come in theſe bad Situations, muſt be much more painful, not only to the Mother and Children, but to the Chirurgeon alſo; for they are then ſo conſtrain'd and preſs'd, that for the moſt part they trouble each other, and hinder both their Births: Beſides, the Womb is then ſo fill'd with them, that the Chirurgeon can ſcarce introduce his Hand without much Violence, which he muſt do, if they are to be turn'd or thruſt back, to give them a better Poſition than that wherein they preſent themſelves.

When a Woman hath two Children, they do not ordinarily both preſent to the Birth together; but the one is often more forward than the other, which is the cauſe why but one is felt, and that ſometimes 'tis not diſcover'd that a Woman will have Twins, till going to fetch the After-birth, the firſt being born,

born, the ſecond is then perceiv'd. When there are Twins, one muſt not think that Nature is orderly in cauſing one to be born before the other, the firſt or laſt, according as it may be moſt convenient: That is to ſay, when one is ſtrong, and the other weak, the ſtrongeſt comes firſt; as alſo when one is dead, and the other living, the living drives forth the dead: for it is apparent that there is no certain Rule, of which I give you an Example.

Sometime ſince I deliver'd two Women within a Week one of the other, both of Twins, one of each being dead, and the other living; the living Child of the firſt Woman was born before the dead, and the dead of the ſecond was expell'd before the living. And the ſame thing happens every day in reſpect of ſtrong and weak Children: For that which is neareſt the Birth, whether alive or dead, ſtrong or weak, is always firſt born, or muſt be brought firſt, if it cannot come of it ſelf; otherwiſe the difficulty of the Labour would yet be augmented as well in length of time to the Mother, as the Violence done to the firſt Child, in putting it back, for to fetch the ſecond firſt.

In *Chap.* 8. we ſhew'd, ſpeaking of natural Labours, how a Woman ſhould be deliver'd of Twins, coming both right. It now remains to direct what ought to be done, when they come either both wrong, or one of them only, as it is for the moſt part; the firſt coming right, the ſecond footling, or any other worſe Poſture: And then muſt the Birth of the firſt be haſtned as much as may be, that ſo there may be preſently way for the ſecond (which hath ſuffer'd much by this unnatural Poſition) to fetch it by the Feet, without trying to place it right, altho' it were ſomewhat inclin'd to it; becauſe it hath been already ſo tir'd and weakned, as alſo the Woman by the Birth of the firſt, that there would be more danger of its dying than coming of it ſelf.

Sometimes when the first is born naturally, the second offers the Head likewise to the Birth: In this Case 'tis good committing a Work so well begun to Nature to finish, provided she be not too slow; for a Child may die, altho' right, by lying too long in the Birth; and the Woman, who hath been much tormented with bearing the first, is usually so tir'd and discourag'd, when she thinks that but half her Work is over, that she hath no more Pains, or very few and slow, nor any considerable Throws to bear the second, as she had done the first. Wherefore if the Birth of the Second proves tedious, and the Woman grows weaker, let the Chirurgeon defer it no longer, but direct his Hand gently into the *Matrix*, to find the Feet, and so draw forth the second Child; which will easily be effected, because there is way made sufficient by the Birth of the first: And if the second Waters be not broke, as it often happens, yet intending to fetch it Footling, he need not scruple to break * the Membranes with his Fingers, altho' elsewhere we have forbidden it. But that must be understood with distinction: For when a Labour is left to Nature's Work, they must break of themselves; but when a Child shall be extracted by Art, there is no danger in breaking them; nay, contrarily, they must be broke, that the Child may be the easier turn'd, which else would be almost impossible.

* *Skins or Skirts.*

Above all, the Chirurgeon must be careful not to be deceiv'd, when both Children together offer to the Birth either their Hands or Feet; and must well consider in the Operation, whether they be not join'd together, or any other ways monstrous; as also which part belongs to one Child, and which to the other, that so they may be fetcht one after the other, and not both together, as would be if it were not duly consider'd, taking the right Foot of the one, and the left of the other, and so drawing them together,

together, as if they belong'd both to one Body; becauſe there is a left and a right, by which means it would be impoſſible ever to deliver them. But it may eaſily be prevented, if, having found two or three Feet of ſeveral Children preſenting together in the Paſſage, and taking aſide two of the forwardeſt, a right and a left, and ſliding his Hand along the Legs and Thighs up to the Twiſt, if forwards; or to the Buttocks, if backwards, he finds they both belong to one Body: And being certain of it, he may then begin to draw forth the neareſt, without regard which is ſtrongeſt or weakeſt, bigger or leſs, living or dead; having firſt put a little aſide that part of the other Child which offers, to have the more way, and ſo diſpatch the firſt, whatever it is, as ſoon as may be; obſerving the ſame Rules as if there was but one, that is, keeping the Breaſt and Face downwards, with every Circumſtance directed where the Child comes footling, and not fetch the Burden, till the ſecond Child be born; becauſe there is commonly but one * for both, which if it were looſen'd from the ſides of the Womb, would cauſe a flooding, for the Reaſons already alledg'd, that the Orifices of the Veſſels to which it was join'd, would continue open by this Separation, as long as the Womb was diſtended by the other Child yet within it, and never cloſe (as it often happens) till being quite emptied of all, it begins to contract it ſelf, and retire (as a Man may ſay) within it ſelf.

* *To that I have ſpoken before.*

When therefore the Chirurgeon hath drawn forth one Child, he muſt ſeparate it from the Burden, having tied and cut the Navel-ſtring, and then fetch the other by the Feet in the ſame manner; and afterwards bring the Burden with the two Strings, as hath been ſhew'd in the proper place. If the Children offer any other part than the Feet, the ſame courſe muſt be taken as is directed in the foregoing

Chapters, where the ſeveral unnatural Figures are diſcours'd of; always obſerving, for the Reaſons above-mention'd, to begin the Operation with the Child that is loweſt in the Paſſage, and in the moſt commodious Figure for extraction.

CHAP. XXVII.

Of a Labour when the Navel String comes firſt.

AN Infant doth not always preſent with the Belly when the Navel-String comes firſt: For tho' he preſents naturally as to the Figure of his Body, that is, with the Head firſt, yet ſometimes the Navel-ſtring falls down and comes before it; for which cauſe the Child is in much danger of Death, at leaſt if the Labour be not very quick, becauſe the Blood (that ought to paſs and repaſs thro' thoſe Veſſels which compoſe it, to nouriſh and enliven the Child, whilſt he continues in the Womb) being coagulated, hinders the Circulation which ought to be there made: Which happens as well by the Contuſion, as the Cold thoſe Veſſels receive, being much preſs'd in the Paſſage, when it comes together with the Head of any other Part, as alſo becauſe the Blood doth there coagulate (as is ſaid) by reaſon of the Cold which it takes by the coming forth of the Navel-ſtring.

But tho' this Accident may cauſe the Infant's ſudden Death, 'tis not ſo much for want of Nouriſhment, without which he might paſs a Day, or more, there being Blood enough in his Body for that purpoſe; but becauſe the Blood can be no longer vivify'd and renew'd by Circulation, as it hath continual need: which being obſtructed, always cauſeth the Creature's ſudden Death, ſooner or later, according as it is more or leſs obſtructed.

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I know it may be objected, That tho' the Circulation be so hinder'd and intercepted by the coming forth of the String, it need not therefore cause such a sudden Death to the Child, because the Blood may notwithstanding circulate in all the other Parts of the Body. To which I answer, That in respect to the Infant, 'tis either absolutely necessary that the Blood, for want of Respiration, should be elaborated or prepar'd in the * *Placenta*, and therefore there must be a free Communication; or for want of it, that the Infant must immediately breathe by the Mouth, as well to be refresh'd, as to drive forth by Expiration the fuliginous Vapours, which not being possible whilst in the Womb, it must unavoidably be choak'd, and die in a very small time, if it wants both together. Wherefore in this case the Woman must without any delay be deliver'd; which if Nature doth not speedily perform, the Child must be drawn forth by the Feet.

* *The Burden.*

Women that have great Waters, and a long String to the Burden, are very subject to this Mischief: for the Waters coming forth in great abundance at the breaking of the Membranes, do often at that instant draw the String, which swims in the midst, forth along with them; and much the easier, if the Infant's Head be not advanc'd very forward into the Passage, to hinder the coming forth of it in this manner.

As soon as 'tis perceiv'd, you must immediately endeavour to put it back, to prevent the cooling of it, behind the Child's Head, lest it be bruis'd, as we have already noted, whereby the Blood may coagulate there; keeping it in that place where it was thrust back, until the Head being fully come down into the Passage, may hinder the coming down of it again: which may be effected by holding it up with the Fingers of one Hand on that side it comes down, until the Head be advanc'd as aboveſaid; or in case the Hand be taken away, to put a piece of fine soft

Rag

Rag between that side of the Head and the Womb, to stop up the way it came down by, always leaving an end of the Rag without the Body, for to draw it forth by at pleasure.

But sometimes, notwithstanding all these Cautions, and the putting back of it, it will yet come forth every Pain; then, without further Delays, the Chirurgeon must bring the Child forth by the Feet, which he must search for, tho' the Infant comes with the Head; for there is but this only means to save the Child's Life, which it would certainly lose by the least delay in this Case. Wherefore having plac'd the Woman conveniently, let him gently put the Head, which offers, back (provided it be not engag'd too low among the Bones of the Passage, and that it may be done without too great Violence to the Woman; for in that Case * it will be better to let the Child run the hazard of dying, than to destroy the Mother) and then slide up his Hand well anointed under the Breast and Belly to search for the Feet, by which he must draw it forth according to former Directions: this being dispatch'd, let him immediately take great care of the Infant, which is ever in this Case very feeble.

* *See the Preface.*

CHAP. XXVIII.

Of a Labour wherein the Burden either first offers, or first comes quite forth.

THE coming forth of the Navel-String before the Infant, of which we have treated in the foregoing Chapter, is often the Cause of his Death, for the Reasons there given: but the coming first of the Burden, is yet much more dangerous: for besides

that

that the Children are then ordinarily Still-born, if they be not assisted in the very instant, the Mother likewise is often in very great peril of her Life, because of her great Floodings which usually happen when it is loosen'd from the Womb before its due time, because it leaves all the Orifices of the Vessels open, to which it did cleave, whence flows incessantly Blood, until the Child be born: because the Womb, whilst any thing continues there, doth every moment strongly endeavour to expel it, by which means it continually voids and expresseth the Blood of the Vessels, which are always open (as we have already often explain'd) when the Burden is so separated, as long as the Womb remains extended and cannot be clos'd, until it hath voided all that it did contain, and comes by the contraction of its membranous Substance to stop them, by pressing them together. Wherefore if we ought to be vigilant to succour an Infant when the String comes first, we ought much more to be so when the Burden comes forth first, and the least delay is ever the Cause of the Infant's sudden Death, if the Woman be not speedily deliver'd; because the Infant cannot stay then long in the Womb without Suffocation, standing then in need of breathing by the Mouth (as is explain'd in the foregoing Chapter) the Blood being no longer vivify'd by the preparation made in the Burden, the Use and Function of which then ceaseth, from the instant it is separated from the Vessels of the Womb, to which it is join'd: for which reason there immediately follows a great Flooding, which is so dangerous for the Mother, that, without speedy help, she soon loseth her Life by this unlucky Accident.

When the Burden is not wholly come forth, but lies in the Passage, some advise to put it back before the Child be fetcht: but I am not of that Opinion; for when it comes into the Passage before the Infant, it is then totally divided from the Womb, at

the

the bottom of which it ought ordinarily to be ſituated and faſtned, until the Child be born: But becauſe (as ſoon as it is wholly looſen'd, as it always is when it comes firſt) it becomes a Body altogether unnatural, it muſt never be thruſt back, but on the contrary be fetch'd away; and at the very moment after bring the Child by the Feet, altho' it came naturally with the Head firſt. For what reaſon can there be to put it back, ſince it is of no uſe to the Infant, from the moment it is ſeparated from the Womb, as cannot be deny'd? And ſuch a Proceeding is ſo far from being uſeful, that this Burden would much hinder the Chirurgeon from being able to turn the Child as he ought, to bring it by the Feet.

Wherefore, when it preſents in the Paſſage, which may be ſoon perceiv'd, if they find every where a ſoft Subſtance, without the leaſt reſiſtance to the touch of any ſolid part; finding likewiſe the String faſtned to the middle of it, and the Woman flooding extreamly, as is ordinary at ſuch times: Then, inſtead of thruſting it back, the Burden muſt be brought away, that ſo there may be more liberty and room to extract the Child, according to former Direction.

The Burden being quite looſen'd from the Womb, and coming firſt in the Paſſage, muſt not be thruſt back into it again: much leſs muſt it be put back, when it is quite come forth of the Body. Care muſt be only taken that the String be not cut till the Child be born, not out of hopes of any benefit from it to the Infant during the Delivery, but that ſo much time may not be loſt before the Infant be fetch'd, which is then ever in great danger; as alſo the flooding may be the ſooner ſtopt, which happens for the moſt part as ſoon as the Woman is deliver'd, for which Reaſons it muſt be with all poſſible ſpeed diſpatch'd.

Sometimes, notwithſtanding this dangerous Accident, the Child may be born alive, if timely ſuccour'd;

cour'd; but it is then so weak, that 'tis hard to discover at first, whether it be living or dead.

When it so happens, the Midwives do ordinarily, before they separate the Burden, put it into a Skellet of hot Wine, and imagine, with no small Superstition, that in case it comes to it self, the Vapours of the warm Wine was the Cause of it, being convey'd, by means of the String, into the Infant's Belly, and so giving it vigour: But it is more credible, that being almost suffocated for want of Respiration as soon as it needed it, it begins now, by means of it, to recover from that fainting. But nevertheless, there is no hurt in keeping the Custom, tho' superstitious, since it can do no prejudice, and may satisfie pre-engag'd Spirits, provided Necessaries be not neglected, in being blindly carry'd away with this Conceit.

CHAP. XXIX.

Of Floodings or Convulsions in Labour.

THE best Expedient and safest Remedy for Mother and Child in this Case, who are both in great danger, is to deliver the Woman presently, without any delay, fetching the Child away by the Feet, at what time soever of the Woman's being with Child, whether at full reckoning or no. [*The Author you see was only a Chirurgeon.*]

I have at large directed, in the 20th Chapter of the first Book, speaking of Floodings, what ought to be done in these Cases, where I related the sad Story of one of my Sisters, which I shall not again repeat, being too sadly affected with it; but refer the Reader to that Chapter for sufficient Directions in these dangerous Accidents.

CHAP.

CHAP. XXX.

How to deliver a Woman when the Child is Hydropical or Monstrous.

A Child may in the Womb have either the Dropsy of the Head, call'd *Hydrocephale*, or of the Breast, or of the Belly. And these Parts are so fill'd with Water (as I have sometimes met with) that they are much too big for the Passage thro' which the Child must issue; then, notwithstanding any Throws or Endeavours the Woman may attempt to bring it forth, 'tis impossible she should effect it without the help of Art: as likewise when the Child is monstrous, either by being only too big in the whole Body, or in any particular Part, or by being join'd to another Child.

If the Child be living that hath the Dropsy, when the Woman is in Labour, it must be destroy'd to save the Mother, by making a Hole in either the Head, Breast, or Belly of it, where the Waters are contain'd; that being emptied by the Apertion so made, the Child may the easier be drawn forth, or else he must necessarily die in the Womb, not being able to be born, and remaining there will also kill the Mother: wherefore to save her Life, the Infant must be by an indispensable * necessity brought forth by Art, since 'tis impossible it should come of it self, which may be done with a crooked Knife sharp at the very Point, like that mark'd C, among the Instruments at the end of the second Book, the Chirurgeon proceeding in the following manner.

* *See the Preface.*

After that the Woman is plac'd conveniently for the Operation, he must slide up his left Hand on the right Side of the inferior part of the Infant's Head, if

if the Waters be contain'd therein, which he will perceive by the extraordinary bigneſs and extent of it, the *Sutures* much ſeparated, and the Bones of it far diſtant one from the other, by reaſon of the Diſtention made by the inclos'd Waters: of which being very certain, let him ſlide with his right Hand along the inſide of his left this crooked Knife, taking care that the point of it, in introducing it, be always towards his left hand, for fear of wounding the Womb; and having conducted it cloſe up to the Head, againſt one of the *Sutures*, let him turn the Knife towards it, and make an Apertion large enough to let out the Water: and then it will be very eaſy to bring forth the Child, foraſmuch as the other Parts are then uſually ſmall and much conſum'd.

If theſe Waters were contain'd in the Breaſt or Belly, then the Child's Head, being no bigger than ordinary, may be born: but the Body being exceedingly ſwell'd with the Waters will ſtay behind; as it happen'd to that Child that had a Dropſy of the Belly, which I mention'd in the 19th Chapter of this Book, to which I refer you, becauſe 'tis much to this purpoſe.

The caſe being thus, let the Chirurgeon ſlide up his left Hand, as aforeſaid, and the Inſtrument with the right, juſt to the Breaſt or Belly, to make an Inciſion, juſt as I did in the ſame caſe, related in the ſaid Chap. 19. to let out the Waters: after which he may with much eaſe finiſh the Operation.

You muſt know, that 'tis much more difficult to deliver a monſtrous Birth, or two join'd together, than one that hath the Dropſy: becauſe the bigneſs of the hydropick parts may be eaſily leſſen'd by a ſingle Inciſion, which is ſufficient to let out the Waters which diſtend; and then 'tis eaſy to diſpatch the reſt.

But when a monſtrous Child, or a double one, is to be extracted, a ſingle Apertion is not enough, but ſome-

ſometimes 'tis neceſſary to take off whole Members from thoſe Bodies, which makes the Operation much more painful and laborious, and requires more Time and Skill to effect it: In which caſe the Left Hand muſt be introduc'd into the Womb, and the ſharp Knife of the Right juſt to the Parts that are to be divided and ſeparated; and there with all the Care that may be, the Member of the monſtrous Child muſt, if poſſible, be taken off juſt at the Joint. And when there are two Children join'd together, the Separation muſt be made juſt in the place where they join; and afterwards they may be deliver'd one after the other, always taking them by the Feet: And if it hath but one, the ſame thing may be accompliſh'd, after having leſſen'd the bigneſs of it, by cutting off ſome one of the Members.

I have already ſhown, in Chap. 15. of this Book, ſpeaking of the Extraction of a Child's Head, left alone behind in the Womb, of what Faſhion this Inſtrument ought to be, that the Operation may be conveniently perform'd, and that it ſhould be as long as an ordinary Crotchet, for the greater Surety and Facility; becauſe that holding the handle of it with the right Hand, it may be thruſt, drawn, ſlop'd and turn'd, without Pain, to any ſide at pleaſure; and with the Left, which is within the Womb, it may be guided to cut and diſmember more skilfully and eaſily thoſe Parts which muſt be ſeparated. Wherefore it ought to have a handle ſo long, that the Chirurgeon's right Hand without the Womb may hold and govern it as aboveſaid, and conduct it the better in the Operation; which could not be ſo ſafely and conveniently done, if this Inſtrument were ſo very ſhort, as all other Authors recommend: Becauſe in this occaſion the Chirurgeon's Hand is ſo conſtrain'd and preſs'd in the Womb, that he can hardly there have the liberty to move his Fingers ends, which

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is the Cauſe why he cannot, without much difficulty, govern ſuch an Inſtrument with one Hand only; unleſs he would very much force and offer Violence to the Womb, and thereby exceedingly endanger the poor Woman's Life. Let us now come to the Extraction of a dead Child, and ſhow the ſeveral Ways of doing it.

CHAP. XXXI.

Of delivering a dead Child.

WHEN the Infant is dead in the Mother's Belly, the Labour is ever long and dangerous, becauſe for the moſt part it comes wrong; or, tho' it comes right with the Head, the Woman's Pains are ſo weak and ſlow in theſe caſes, that ſhe cannot bring it forth, and ſometimes ſhe has none at all; forasmuch as Nature, half overthrown by the Death of the Child, which cannot help it ſelf, labours ſo little, that many times it cannot finiſh the Buſineſs it hath begun, but muſt yield without the help of Art, of which at that time it hath great need. However, before you come to manual Operation, endeavour to ſtir up the Woman's Pains with ſharp and ſtrong Clyſters, to bring on Throws to bear down and bring forth the Child: but if this prevails not, ſhe muſt be deliver'd by Art.

We have declar'd in Chap. 12. of this Book, the Signs to know a dead Child in the Womb, of which the chief are: If the Woman perceives it not to ſtir, nor hath a long time before; if ſhe be very cold, much Pain and Heavineſs in the bottom of her Belly; if the Child be not ſupported, but always falls like a Maſs of Lead to that ſide on which the Woman lies; if the Burden or Navel-ſtring hath

been a long time in the World; and if no Pulsation be there felt, and that dark and stinking putrid Matter comes away from the Womb. All these Signs together, or most of them, show the Child is assuredly dead: Which, when the Chirurgeon is certain of, he must do his Endeavour to fetch it as soon as possible he can; and having plac'd the Woman according to former Directions, if the Child offers the Head first, he must gently put it back, until he hath liberty to introduce his Hand quite into the Womb; and sliding it all along under the Belly to find the Feet, let him draw it forth by them, as is formerly taught; being very careful to keep the Head from being lockt in the Passage, and that it be not separated from the Body, which may easily be done when the Child being very rotten and putrify'd, the Chirurgeon doth not observe the Circumstances often repeated by us, that is (in drawing it forth) to keep the Breast and Face downwards. And if, notwithstanding all these Precautions, the Head, because of the great Putrefaction, should be separated, and remain behind in the Womb, it must be drawn forth according to the Directions formerly given in the proper Chapter.

But when the Head coming first, is so far advanc'd and engag'd among the Bones of the Passage, that it cannot be put back, then being very sure, by all the Signs together, or most of the chief of them, that the Child is certainly dead, 'tis better to draw it so forth, than to torment the Woman too much by putting it back, to turn it and bring it by the Feet: But because (it being a part round and slippery, by reason of the Moisture) the Chirurgeon cannot take hold of it with his Fingers, nor put them upon the side of it, because the Passage is fill'd with its bigness, he must take a * Crotchet, like one of those mark'd A and B, amongst the Instruments at the end of this Second Book, and put it up

* *Tho' this Crotchet cannot hurt a dead Child, yet it may endanger the Woman by slipping: wherefore*

the

up as far as he can without Violence, between the Womb and the Child's Head; obſerving to keep the point of it towards the Head, where he muſt faſten it, endeavouring to give it good hold upon one of the Bones of the Skull, that it may not ſlide, forcing in the point of it, which muſt be ſtrong, that it may not turn: and after the Crotchet is fix'd well in the Head, he may therewith draw it forth, keeping the ends of the Fingers of his left Hand, flat upon the oppoſite ſide, the better to help to diſengage it, and wagging it by little and little, to conduct it directly out of the Paſſage.

the Tranſlator of this Treatiſe cannot approve of it, having an eaſier and ſafer way to do this Operation, as he mentions in his Preface to this Book.

It were to be wiſh'd that it were poſſible to introduce the † Crotchet ſo far, that one might fix it (for the better hold) in one of the Eye-holes, or Cavities of the Ears: but very often there is not room at firſt to carry them beyond the middle of the Head, and then they muſt be faſten'd according to our Directions; and rather, if poſſible, on the hinder part than any other; that ſo it may be drawn forth in a ſtrait Line. And when by the firſt faſtning of the Crotchet the Head is drawn lower, and begins to be diſengag'd, you may looſen it out of the firſt place to faſten it farther up, that ſtronger hold may be taken; || and ſo ſucceſſively removing and faſtning of it till the Head be quite born, and then taking hold of it immediately with the Hands only, the Shoulders may be drawn into the Paſſage: and ſo ſliding the Fingers of both Hands under the Armpits, the Child may be quite deliver'd, and then the Burden fetch'd to finiſh the Operation according to Knowledge; being careful not to pull

† *All this were to no purpoſe, if any had the Art to do it, as the Tranſlator can, and mentions in his Preface to this Book.*

|| *This is needleſs and dangerous in caſe Crotchets be us'd, unleſs they loſe their hold.*

the Navel-ſtring too hard, leſt it break, as it often happens when it is corrupted.

If the dead Child (of which above all there muſt be good aſſurance) comes with the Arm up to the Shoulders ſo extreamly ſwell'd, that the Woman muſt ſuffer too much Violence to have it put back, 'tis beſt then to take it off at the Shoulder-Joint, by twiſting it three or four times about, as we have already taught in another place; by which means there is no need of either Knives, Saws, or ſharp Pincers, as ſome Authors will have it, it being very eaſily perform'd without all that Proviſion, becauſe of the Softneſs and Tenderneſs of the Body. After the Arm is ſo ſeparated, and no longer poſſeſſes the Paſſage, the Chirurgeon will have more room to put up his Hand into the Womb, to fetch the Child by the Feet, and bring it away, as hath been directed.

Altho' the Chirurgeon be ſure the Child is dead in the Womb, and that it is neceſſary to fetch it by Art, he muſt not therefore preſently uſe his Crotchets, becauſe they are never to be us'd but when Hands are not ſufficient, and that there is no other Remedy to prevent the Woman's Danger, or to bring the Child any other way: becauſe, very often, tho' he hath done all that Art directs, Perſons preſent, that underſtand not theſe things, will believe that the Child was kill'd with the Crotchets, altho' it had been dead three Days before; and without other Reaſonings, or better underſtanding of the matter, for recompence of his ſaving the Mother's Life, requite him with an Accuſation, of which he is altogether innocent; and, in caſe the Mother by Misfortune ſhould afterwards die, lay her Death alſo to his Charge; and inſtead of Praiſe and Thanks, treat him like a Butcher or Hangman: to which divers Midwives are uſually very ready to contribute, and are the firſt that make the poor Women, that have need of the Men, afraid of them. So much are they in fear of being blam'd by

them,

them, for having themſelves been the Cauſe (as ſome of them often are) of the Death of Infants, and many ill Accidents which after befal the poor Women, not cauſing them to be help'd in due time, and from the moment they perceive the Difficulty of the Labour to paſs their Underſtandings.

To avoid therefore theſe Calumnies, let the Chirurgeon never uſe the Crotchets but very rarely, and when there is no other way; and alſo endeavour his utmoſt (as much as the caſe will permit) to bring the Child whole altho' dead, and not by bits and pieces, that thereby the Wicked and Ignorant may have no pretence of blame: I ſay, as much as the Caſe will permit, that is, with reſpect to the Woman under his Hands; for to ſave her, he had better ſometimes bring the dead Child with * Inſtruments, than kill her, by tormenting her with exceſſive Violence to bring it whole. But in a Word, we muſt in Conſcience do what Art commands, without heed to what may be ſpoken afterwards: and every Chirurgeon, that has a well order'd Conſcience, will ever have a greater regard to his Duty than Reputation; in performing of which let him expect his Reward from God.

* *Thoſe Inſtruments are very unſafe for the Woman; and having a better way, I cannot paſs them without manifeſting my diſlike.*

CHAP. XXXII.

Of extracting a Mola *and falſe Conception.*

HAVING at large ſpoken in another place of the Cauſes, Signs and Differences of *Mola*'s and falſe Conceptions, and ſhew'd, that a *Mola* always ariſeth from a falſe Conception, there remains nothing to be demonſtrated but the manner how it ought to be extracted. Now ſince theſe things con-

tain'd in the Womb, are totally preternatural, their Expulsion must be procur'd as soon as possible, which is very difficult, when these strange Bodies cleave to it, and especially the *Mola*; which not being drawn forth, will often continue so fasten'd two or three Years, nay, sometimes the whole remaining part of the Woman's Life, as *Pareé* tells us in the Story of the Pewterer's Wife, that had one seventeen Years, whom he open'd after her Death.

To avoid the like Accident, and abundance of Inconveniences which a *Mola* brings, it must be endeavour'd to be expell'd as soon as may be; trying, before you come to manual Operation, to cause the Woman to expel it of her self: To which purpose give her strong and sharp Clysters, to stir up Throws to open the Womb to give way to it, relaxing and moistning it with emollient Ointments, Oils and Grease, not omitting Bleeding in the Foot, and half Baths, if there be occasion. The *Mola* will certainly be excluded by these Means, provided it be but of an indifferent bigness, or that it adheres little or not at all to the Womb: But if it cleaves very strongly to the bottom of the Womb, or that it be very big, the Woman will hardly be rid of it without the help of a Chirurgeon's Hand; in which case, after that he hath plac'd the Woman conveniently, as if he were to fetch a dead Child, let him slide his Hand into the Womb, and with it draw forth the *Mola*, using (if it be so big as that it cannot be brought whole, which is very rare, because it is a soft tender Body, much more pliable than a Child) a Crotchet or Knife to draw it forth, or divide it into two or more parts, as the case shall require. If the Chirurgeon finds it join'd and fasten'd to the Womb, he must gently separate it with his Fingers ends, his Nails being well par'd, putting them by little and little between the *Mola* and the Womb, beginning on that side where it doth not stick so fast, and pur-

suing

ſuing it ſo until it be quite looſen'd; being very careful, if it grows too faſt, not to rend nor hurt the proper Subſtance of the Womb; proceeding according to the Directions we have given for the Extraction of a Burden ſtaying behind in the Womb, when the String is broke off.

This *Mola* never hath any String faſten'd to it, nor any Burden from whence it ſhould receive its Nouriſhment: But it doth of it ſelf immediately draw it from the Veſſels of the Womb, to which it is moſt commonly join'd, and ſticking in ſome place. The Subſtance of its Fleſh is alſo much more hard than that of the Burden, and ſometimes it is *ſchirrous*, which is the Cauſe why it is not ſo eaſily ſeparated from the Womb.

As to a falſe Conception, tho' it be much leſs than a *Mola*, yet it often puts a Woman in hazard of her Life, becauſe of great Floodings, which very often happen, when the Womb would diſcharge it ſelf of it, and endeavour to expel it; which ſeldom ceaſeth until it be come away, becauſe it doth ſtill endeavour to exclude it, by which the Blood is excited to flow away, and in a manner ſqueez'd out of the open Veſſels.

The beſt and ſafeſt Remedy for the Woman in this Caſe, is to fetch away the falſe Conception as ſoon as may be, becauſe the Womb can very ſeldom, and with very great Difficulty, void it without help; for it being very ſmall, the Woman's Impulſe in bearing downwards cannot be ſo effectual when the Womb is but little diſtended by ſo ſmall a Body, as when it contains a conſiderable Bulk in it; for then it is more ſtrongly compreſs'd with the Throws. Many times 'tis exceeding difficult to fetch theſe falſe Conceptions, becauſe the Womb doth not open and dilate it ſelf ordinarily beyond the proportion of what it contains; and that being very little, ſo is its opening: Which is the reaſon why the Chirurgeon

ſometimes is ſo far from introducing his whole Hand, that he can ſcarce put in a few Fingers, with which he is oblig'd to finiſh the Operation, as well as he can, proceeding in the following manner when he hath introduc'd them.

Having well anointed his Hand, he muſt ſlide it up the *Vagina* to the inward Orifice, which he will find ſometimes but very little dilated; and then very gently put in one of his Fingers, which he muſt preſently turn and bend on every ſide, till he hath made way for a ſecond, and afterwards a third, or more if it may be done without Violence: but many times one hath enough to do to get in only two, between which he muſt take hold (as Crabs do with their Claws when they take any thing) of the falſe Conception, which he muſt gently draw forth, and alſo the clodded Blood which he there finds. Afterwards the Flooding will undoubtedly ceaſe, if no part of this Conception be left behind, as I have often found by Experience, when I have taken the ſame courſe: but if the inward Orifice cannot be more dilated than to admit but one Finger, and the Flooding is ſo violent as to endanger the Woman's Life, the Chirurgeon then having introduc'd his Fore-finger of his left Hand, muſt take with his right an Inſtrument, call'd a Crane's Bill, or rather a *Forceps* (like that mark'd *G*, among the Inſtruments at the end of this ſecond Book) and guide the end of it along his Finger, to fetch with this Inſtrument the ſtrange Body out of the Womb; taking heed that he pinch not the Womb, and that the Inſtrument be always conducted by the Finger firſt introduc'd, which will judge and diſtinguiſh by the touch between this Conception and the Subſtance of the Womb: in doing which, there being no other way, he will certainly accompliſh his Buſineſs.

I thought of cauſing ſuch an Inſtrument to be made upon an Occaſion, where it would have ſtood me in good

good ſtead, if I had had it, and with which I have ſince (proceeding according to the Directions I have juſt now given) lately drawn forth a falſe Conception of the bigneſs of a Walnut; which without doubt had elſe that Day been the Death of one nam'd Madam *le Roy*, dwelling near the great Stairs at the Place of *Maubert*, by reaſon of the horrible Loſs of Blood which it occaſion'd, and which ceas'd as ſoon as I had drawn forth this Conception: which I could never have done any other Way, becauſe the inner Orifice of the Womb was not open, nor could be dilated more than for one Finger alone, after the manner I have declar'd. Beſides the preſſing Danger of the Accident, the Delay of the Operation had indubitably been the Death of this Woman, who, Thanks be to God, is ſince well recover'd

CHAP. XXIII.

Of the Ceſarean *Section.*

WHEN a big-bellied Woman is effectively in Labour, 'tis very rare but that an expert Chirurgeon can deliver the Child dead or alive, whole or in pieces; in a word, that he may do the Work compleatly, if he behaves himſelf as the Caſe requires, and according to the Directions given in each particular Chapter foregoing, treating of the ſeveral unnatural Labours, without being neceſſitated in a very inhuman, cruel and barbarous manner, to have recourſe to the *Cæſarean* Operation during the Mother's Life, as ſome Authors have too inconſiderately order'd, and ſometimes practis'd themſelves.

In truth, there would ſeem ſome Pretext of a lawful Excuſe to make Martyrs of theſe poor Women, if it were to bring a ſecond *Cæſar* from them, whom they

they ſay was born in that manner, or ſome great and new Prophet. In the time of the antient Pagans they did uſe to ſacrifice innocent Victims for the publick Good, but never for a private. I know very well that they palliate it with a pretence of baptizing the Infant, which elſe would be depriv'd of it, becauſe the Mother's Death is for the moſt part the Cauſe * of the Child's. But I do not know that there ever was any Law, Chriſtian or Civil, which doth ordain the martyring and killing the Mother, to ſave the Child; 'Tis rather to ſatisfy the Avarice of ſome People, who care not much whether their Wives die, provided they have a Child to ſurvive them; not ſo much for the ſake of the Children, but to inherit by them afterwards: for which cauſe they do eaſily conſent to this cruel Operation, which is damnable Policy. If they ſay, to render the Fact leſs horrible in appearance, that it muſt never be undertaken but when the Woman it reduc'd to the utmoſt Extremity: To that I anſwer, that a Woman often recovers beyond Hope or Probability. And if they object, that ſhe may likewiſe eſcape after this Operation; I do utterly deny it, by the Teſtimony of the moſt expert Chirurgeons that have practis'd it, who always had bad Succeſs, all the Women ever dying in a ſhort time after. I do highly commend *Guillemeau*, who to diſabuſe the World for ſuch a wicked and pernicious Practice, confeſſeth, ſpeaking of this fatal Operation, and owns (by way of Repentance) that he did himſelf twice, in the Preſence of *Ambroſe Pareé*, put it into Practice, and ſaw it thrice done more by three ſeveral very expert Chirurgeons, who omitted never a Circumſtance to make it ſucceed well; and notwithſtanding all, the Women died.

* *Rather the Occaſion.*

As for *Pareé*, he will not acknowledge that he ſaw thoſe two Operations of *Guillemeau*, becauſe he will not have Poſterity know that he was able to conſent

to

to ſo great a Cruelty; but contents himſelf with adviſing only, that it ſhould never be undertaken till the Woman is dead; becauſe there is no Poſſibility ſhe ſhould eſcape it, not only becauſe of the irregular Wound, which muſt of neceſſity be made for this purpoſe in the Belly, but chiefly for that in the Womb, and for the exceſſive Flux of Blood which will immediately follow. However, contrary to the Opinion of two ſuch famous Chirurgeons, there are ſome raſh Perſons, who do obſtinately maintain (tho' with as little Reaſon as *Rouſſet*) that it is not impoſſible for a Woman to eſcape, becauſe they have ſeen ſome that have had the Bones of their dead Children come forth by an abceſs of the Belly, after that the Fleſh of them had paſs'd the natural Way in Suppuration; which Bones by little and little had pierc'd the Womb and the Belly alſo, and after that they were ſo drawn forth, yet the Women recover'd. As alſo others did not die, whoſe Wombs, after Precipitation and perfect Putrefaction and Gangrene, were totally cut away. Indeed we muſt acknowledge what Experience hath many times taught us, as it hath theſe things, which I believe have happen'd, and may again as well as thoſe (tho' rarely:) but it doth not follow, that this *Cæſarean* Operation muſt needs ſucceed as well; becauſe here is made at one Stroke a very great Wound in the Belly and Womb, which is ever the Death of the poor Woman immediately, or ſoon after.

But when Nature it ſelf begins to ſeparate and pierce theſe Parts, by means of theſe Bones, to caſt them forth by ſome new Way which it makes, not being able to do it by the common and natural, for want of the help of skilful Perſons in due time, it doth it by degrees, and not all at once; and according to the meaſure it drives theſe preternatural Bodies forth of the Womb, ſo it reunites and rejoins it at the ſame time proportionably, and without the leaſt

Flux

Flux of Blood, which happens quite otherwiſe in the artificial Operation. And if it be true, that ſome Women have ever eſcap'd it, we muſt believe it a Miracle, and the expreſs Hand of God (who can when He pleaſeth raiſe the Dead, as he did *Lazarus*, and change the Courſe of Nature, when 'tis his good Pleaſure) rather than an Effect of human Prudence.

There are many good Women who, for having only heard ſome Goſſips ſpeak of it, are very confident that they know ſuch and ſuch yet living, whoſe Sides had been ſo open'd to fetch the Child out of their Belly. Nay more, there are ſome who affirm, they know thoſe who have had this Operation practis'd on them three or four times ſucceſſively, and yet alive; and the better to confirm ſo notable a Lye, which they had only heard recited by others, and after having three or four times told it, believe it themſelves for truth, as much as if they had ſeen it with their own Eyes, will tell ſo many Circumſtances and Particulars, that they eaſily perſuade thoſe into a Belief, that do not underſtand the Impoſſibility of it.

There are others again, who ſhewing the Scars of ſome Abceſs they have had in their Belly, would perſuade that a Child hath been taken out there; to which purpoſe I will relate what I once ſaw my ſelf, concerning a big-belly'd Woman that was in the *Hoſtel de Dieu* at *Paris*, when I there practis'd Deliveries. This Woman, whether thro' Cunning, Feigning, or thro' Ignorance really believing it, did teſtify to all the Women who were then in the ſaid *Hoſtel de Dieu*, as alſo to an infinite Number of other Perſons, and among the reſt to a good old Nun that govern'd all, whom they call'd Mother *Bouquet* (and at that time did preſide in the Hall of Deliveries, like another Goddeſs *Lucina*) that ſhe was very much afraid they muſt open her Side to deliver her, as it had been two Years before; in all which Time ſhe had made the ſame Relation to above a thouſand ſeveral Perſons,

each

each of whom, it may be, had again related it to as many more; ſhewing to all of them a great Scar, by which ſhe ſaid the Chirurgeons had drawn the Child out of her Belly. Wherefore ſhe pray'd Mother *Bouquet* to recommend her to me, deſiring rather to be deliver'd by me who was a Chirurgeon, becauſe ſhe might be more ſafely help'd in ſuch a Buſineſs, than by a Midwife. This good Nun giving me this Account, which ſhe verily believ'd according to the Relation; I told her, that not having Faith enough to imagine it, I could not believe the *Cæſarean* Section had been made on that Woman, as ſhe had perſuaded her. If you do not believe it, reply'd ſhe, I will fetch her preſently to you, and ſhe her ſelf ſhall tell you every Circumſtance. And immediately ſhe caus'd her to be fetch'd, who told me the ſame ſhe had related to her: but having particularly examin'd her from what Part the Child was ſo drawn forth, and whether ſhe felt any great Pain in the Operation; ſhe anſwer'd me, None, becauſe ſhe was then ſenſleſs, and remain'd ſo five or ſix Days after. I ask'd her then, how ſhe was certain that the Child was brought away by Inciſion in her Belly, being ſhe was not at that Time ſenſible? She anſwer'd, The Chirurgeon aſſur'd her it was ſo; and at the ſame time ſhe ſhew'd me a great Scar, ſituated juſt on the Right Side of her Breaſt, about the middle of the Ribs, where ſhe had a great Abceſs, of which this Scar remain'd. And when I told her, that the Breaſt was not the Place where a Child ſhould be fetcht, and that I had with my Arguments convinc'd her of the Impoſſibility of what ſhe had believ'd, and made others believe, as the Women of the *Hoſtel de Dieu*, and Mother *Bouquet* alſo; they began to be diſabus'd, and continu'd ſo, when three Days after this Conference I had deliver'd her with the greateſt facility, altho' it was a very great Child, which came quickly. If one ſhould examine well the Beginning of all the Stories

of

of this Operation, ſtrictly weighing them, as I did upon this Occaſion, they would be found to be mere Fables, and that that which *Rouſſet* reports of his *Cæſarean* Labours, is nothing but the Ravings, Capriciouſneſs and Impoſture of their Authors.

Now if, becauſe of all theſe Reaſons, a Chirurgeon muſt never practiſe this cruel Operation whilſt the Mother is alive, altho' the Child be certainly ſo (which for all that may ſometimes be very doubtful) I pray what Infamy would it be for him, if having ſo kill'd the Mother, the Child ſhould alſo be found dead, after it was thought to be alive? much more ought he to abſtain from it, when he is well aſſured it is dead: wherefore he had better pull it in pieces and bits (if it cannot be otherwiſe) by the natural way, than to butcher the Mother to have it whole; and if the Womb were ſo little open, that he could not have liberty to work there, nor introduce any Inſtrument into it, he had better wait a little, always trying to dilate the Paſſages by Art, as we have formerly directed, than to caſt her down almoſt in an inſtant, with ſuch a Blow of Deſpair, as the making of this *Cæſarean* Operation, which for this Reaſon is never to be undertaken, till immediately after the Mother's Death, when the Chirurgeon muſt be preſent to act according to the following Directions, as well in hopes of finding the Child living, as to obey an Ordinance, which expreſly forbids the burying a Woman with Child, before it is taken out of her Belly. To accompliſh which as it ought to be, when he perceives the Woman in the Agony, he muſt quickly make ready all things neceſſary for his Work, to loſe no Time, becauſe Delay will certainly be the Death of the Infant, which elſe a few Moments before might have been brought alive. There are ſome who, when the Woman is juſt a dying, would have ſomewhat put between her Teeth to keep her Mouth open, and likewiſe in the outward Part of the Womb;

to the end the Infant receiving by this means some little Air and Refreshment, may not be so soon suffocated; but all this Mystery will avail very little, because the Child lives only by the Mother's Blood, whilst it is in the Womb: but if he will needs do so, it is rather to content the Company, than out of any belief of the good it will do. As soon then as the Woman has breath'd her last, and that she is dead (to which all the Company must agree) he shall begin his Operation, which the *Greeks* call *Embriulcie*. Most Authors would have it made on the Left Side of the Belly, because it is more free from the Liver, which is on the Right: but if my Opinion may be authentick, it will be better and more skilfully made just in the Middle of the Belly, between the two Right Muscles; because in this place there are only the Coverings and the white Line to cut, when on the Side it cannot be done without cutting the two oblique and cross Muscles, which being couch'd one under the other, makes a considerable Thickness, besides that it bleeds more than towards the Middle of the Belly: Not that the Loss of Blood is of any moment (which will flow when the Woman is but just dead) but because it hinders by its flowing the seeing distinctly how to make the Operation as it should be. To dispatch then with more Ease and Speed, the Chirurgeon having plac'd the dead Body that the Belly may be a little rais'd, let him take a good sharp Incision Knife, very sharp of one Side, like that mark'd *E* in the Table of Instruments at the End of this Chapter, with which he must quickly make, at one Stroke, or at two or three at most (if he will, for the greater Surety) an Incision just in the Middle of the Belly, between the two Right Muscles unto the *Peritoneum*, of the Length or Extent of the Womb or thereabouts; after that he must only pierce the *Peritoneum* with the Point of his Instrument, to make an Orifice for one or two of the Fingers

gers of his Left Hand, into which he must immediately thrust them to cut it (lifting it up with them, and conducting the Instrument for fear of pricking the Guts) in proportion to the first Incision of the *Coverings: which having done, the Womb will soon appear, in which he must make an Incision in the same manner as he did in the *Peritoneum*; being careful not to thrust his Instrument at once too far in, thinking to find the Womb a Finger or two thick, as all Authors affirm contrary to Truth; in which he would be deceiv'd, as those are, who never well consider'd it: for it is very certain, that at the Time of Labour, whilst it contains the Child and Waters in it, it is not above a single Line thick, or the Thickness of a Half-Crown; altho' they have all sang to us, that by Divine Providence and a Miracle, the more 'tis extended with the Child, the thicker it grows, which is absolutely false. 'Tis true indeed, that it is at that Time a little thicker at the Place where the Burden cleaves, where its Substance is then as it were spongeous; but every where else it is very thin, and becomes the more so by how much it is more extended, until being emptied by the Birth of the Child, it begins to grow thicker in contracting and gathering to it self all its Substance, which was before very much extended. It being just like the Bladder, which being full, is very thin, and being empty, appears to us of half a Finger's thickness; which filling again, waxeth thinner in proportion to the Urine which flows to it. Having then so open'd the Womb, he must likewise make an Incision in the Infant's Membranes, taking care not to wound it with the Instrument; and then he will soon see it, and must immediately take it out with the Burden, which he must nimbly separate from the Bottom of the Womb; and finding it to be yet living, let him praise God for having so blessed and prosper'd his Operation.

* *Skins.*

But

But the Children so deliver'd in these Cases are usually so weak (if not quite dead, as it often happens) that 'tis hard to know, whether they are alive or dead. Yet one may be confident the Child is living, if by touching the Navel-string the *Umbilical* Arteries are perceiv'd to move, as also the Heart, by laying the Hand on the Breast; and if it prove so, means must be us'd to fetch it to it self, spurting some Wine in the Nose and Mouth, warming it until it begins to stir of it self. Midwives usually lay the Burden very hot on the Belly of such weak Children; if that helps, 'tis rather because of the temperate Heat of it, than for any other cause: for 'tis impossible the Infant should receive any Spirits from it, after it is once separated from the Womb, and yet less when the Woman is dead. As to the Heat of it, it can no wise hurt; but the weight of this Mass laid on the Belly, may rather choke it, by the compression it makes, than do it any good: Besides, when the Burden is grown cold, they put it in a Skellet of hot Wine, from whence they think the Spirits renew, which being convey'd thro' the String into the Child's Belly, gives it new force. But as I have said already, that is very useless, and the best and speediest Remedy is immediately to separate it, and open the Child's Mouth, cleaning and unstopping all the Nose, if there be any Filth, to help it so to breathe freely, keeping it all the while near the Fire, until it hath a little recover'd its Weakness, spouting some Wine into the Nose and Mouth of it, that it may a little taste and scent it; which cannot hurt it in this juncture, if one observes some Moderation in the thing.

Having now at large treated in this second Book, as well of Natural as Unnatural Labours, and given sufficient Instructions to a Chirurgeon to enable him to help Women in the first, and to remedy all the

different Accidents of the latter, to which he may be daily call'd, there rests nothing now to finish it, but to represent the Instruments proper to this Art. And then we will pass to the Third Book, where we must handle many things, which they must necessarily know who intend to practise Deliveries.

Explication of the Instruments.

A, *A Crotchet or Hook to draw forth a dead Child.*

B, *Another Crotchet for the same purpose, according as the Case requires, either bigger or less: both of them must be strong enough, and very smooth and equal, that the Womb may not be hurt in the Operation, and above ten large Inches long, or thereabouts; and their Handles must be of a moderate bigness, for the firmer holding of them.*

C, *A crooked Knife, equal in length to the Crotchets, fit for the separating a monstrous Child, or piercing of the Belly of an hydropical Infant, or opening the Head to empty the Brains, or to divide it in pieces, when, because of its Bigness or Monstrousness, it remains behind in the Womb, separated from the Infant's Body.*

D, *Another small crooked Knife for the same purpose, but not so convenient, because it cannot be guided but with one Hand.*

E, *A sharp Incision-Knife fit for the* Cæsarean *Section, soon after the Mother's Death.*

F, *A Crane's Bill, fitted for drawing forth of the Womb any strange Body, or false Conception, when the whole Hand cannot be introduc'd.*

G, *Another Instrument for the same purpose.*

H, *A* Speculum Matricis, *with three Branches to open the Womb, to discover Ulcers or other Maladies, sometimes there deeply situated.*

I. *Another*

I, *Another of two Branches, for the same purpose.*
K, *Another yet more commodious.*
L, *A* Catheter *to let out the Urine, when the Woman cannot make Water.*
M, *A Syringe for Injections into the Womb.*

The End of the Second Book.

The Third BOOK.

Treating of Women in Child-bed, and of the Diſeaſes and Symptoms befalling them at that time. Of Children new born, and their ordinary Diſtempers; together with neceſſary Directions to chooſe a Nurſe.

GOING with Child is as it were a rough Sea, on which a big-belly'd Woman and her Infant floats the ſpace of nine Months: And Labour, which is the only Port, is ſo full of dangerous Rocks, that very often both the one and the other, after they are arriv'd and diſembark'd, have yet need of much help to defend them againſt divers Inconveniencies which uſually follow the Pains and Travail they have undergone in it.

We have directed in the Firſt Book, treating of the Diſeaſes which are incident to Women with Child, how to prevent their ſuffering Shipwrack in this Sea during ſo long a Voyage. In the Second we have taught, how they may enter this Port, and diſembark there with Safety, by Delivery. It remains then to compleat our Work, that we expound in this Third and Laſt, how the Mother and Child muſt afterwards be order'd, and declare how at this time to prevent and remedy divers Indiſpoſitions which often happen to them both. Let us firſt conſider thoſe which

are

are incident to a Woman new laid, and then we shall pass to those which regard a new born Infant.

CHAP. I.

What is fit to be done to a Woman new laid, and naturally deliver'd.

IMmediately after the Woman is deliver'd, and the Burden come away, Care must be taken that the loosening of it be not follow'd with a Flooding; which if it be not, a soft Closure to the Womb must immediately be apply'd, five or six double, to prevent the cold Air entring in, which suddenly stops the Vessels, by which the Woman should cleanse by degrees: whereby there would certainly happen many ill Accidents, as great Pains and Gripes of the Belly, Inflammation of the Womb, and divers others, which we shall mention hereafter particularly, and which may easily be the cause of her Death.

When the Womb is so clos'd, if the Woman was not deliver'd upon her ordinary Bed, let her be presently carry'd into it by some strong body, or more if there be need, rather than to let her walk thither; which Bed must be first ready warm'd and prepar'd as is requisite, because of the Cleansings: but if she was deliver'd on it (which is best and safest to prevent the Danger and Trouble of carrying her to it) then all the foul Linen and other things put there for the receiving the Blood, Waters, and other Filth which comes away in Labour, must be presently remov'd, and she must be plac'd conveniently in it for her Ease and Rest, which she much wants, to recover her of the Pains and Labour she endur'd during her Travail; that is, with her Head and Body a little rais'd, to breathe the freer and cleanse the

better, especially of that Blood which then comes away, that so it may not clod, which being retain'd, causes very great Pains. All this will happen, if they have not liberty to come freely by this convenient Situation; in which she must put down her Legs and Thighs close together, having a small Pillow (for her greater ease if she desire it) under her Hams, upon which they may rest a little: being so put to Bed, let her lie neither of one side nor the other, but just on the middle of her Back, that so the Womb may repossess its natural and proper Place.

It is an ordinary Custom to give the Women, as soon as they are deliver'd, two Ounces of Oil of sweet Almonds, drawn without Fire, and as much Syrup of Maiden-Hair mix'd together, which is as well for to sweeten and temper the inside of the Throat, which was heated and hoarse by her continual Cries, and holding her Breath to bear down her Throws during her Labour; as also to the end that her Stomach and Intestines being lin'd with it, should not be so much afflicted with dolorous Gripes: But this Potion goes so much against the Stomachs of some Women, that being forc'd to take it with an Aversion and Disgust, it may do them rather more hurt, than any-wise comfort them. Wherefore let none have it but those who desire it, and have no Aversion to it. I approve rather in this Case of a good Broth to be given her, as soon as she is a little settled after the great Commotion of Labour, because it will be more pleasing and profitable than such a Potion. And having thus accommodated her, and provided for her Belly, Breasts and lower Parts, after the manner we shall direct in the next Chapter, leave her to rest and sleep if she can, making no noise, the Bed Curtains being close drawn, and the Doors and Windows of her Chamber shut, that so seeing no Light, she may the sooner fall asleep.

ſleep. If ſhe had endur'd a hard Labour, ſhe muſt be then order'd as the Caſe requires, and as ſhall be hereafter declar'd: but what we have here directed is only for a natural Labour, and where no extraordinary Difficulty happens.

CHAP. II.

Of convenient Remedies for the lower Parts of the Belly and Breaſts of Women newly deliver'd.

SINCE the lower Parts of a Woman are greatly diſtended by the Birth of an Infant, it is good to endeavour therefore the prevention of an Inflammation there: Wherefore as ſoon as the Bed is cleans'd from the foul Linen and other Impurities of the Labour, and that the Woman is therein plac'd, according to the Direction of the preceding Chapter, let there be outwardly apply'd all over the bottom of her Belly, and Privities, the following *Anodine Cataplaſm*, made of two Ounces of Oil of ſweet Almonds, with two or three new laid Eggs, Yolks and Whites, ſtirring them together in an Earthen Pipkin over hot Embers, till it comes to the conſiſtence of a Pultiſs; which being ſpread upon a Cloth, muſt be apply'd to thoſe Parts indifferently warm, having firſt taken away the Cloſures (which were put to her preſently after her Delivery) and likewiſe ſuch Clods of Blood as were there left.

This is a very temperate Remedy, and fit to appeaſe the Pains which Women ordinarily ſuffer in thoſe Parts, becauſe of the Violence then endur'd by the Infant's Birth; it muſt lie on five or ſix Hours, and then be renew'd a ſecond time if there be occaſion: Afterwards make a Decoction of Barly, Linſeed, and Chervil; or with Marſh-Mallows and Vio-

let-Leaves, adding to a Pint of it an Ounce of Honey of Roses; with which, being luke-warm, foment three or four times a Day (for the first five or six Days of Child-bed) the Bearing-place, cleansing it very well from the Blood, Clods and other Excrements which are there empty'd. This *Stupe* is likewise very good to temper and appease the Pains of those Parts. Some Persons only use to this purpose luke-warm Milk, and many Women only Barly-water. Great care must be taken at the beginning, that no stopping things be given to hinder the Cleansings; but when ten or twelve Days are past, and that she hath cleans'd very sufficiently, Remedies may then be us'd to fortify the Parts: to which purpose a Decoction is very proper, made of Province-Roses, Leaves and Roots of Plantane, and Smith's Water that Iron is quench'd in. And when she hath sufficiently and fully done cleansing, which is usually after the 18th or 20th Day, there may be made for those who desire it, a very strong astringent Lotion, to fortify and settle those Parts which have been much relax'd, as well by the great extension they receiv'd, as by the Humours with which they have been so long time soak'd. This Remedy may be compos'd with an Ounce and an half of Pomegranate Peel, an Ounce of *Cypress* Nuts, half an Ounce of Acorns, an Ounce of *Terra Sigillata*, a handful of Province-Roses, and two Drachms of Roch-Allum: all which being infus'd a whole Night in five half Pints of strong red Wine, or (that it may not be too sharp) a quantity of Smith's Water mix'd with that Wine; afterwards boil it well to a Quart, then strain it, squeezing of it strongly, and with this Decoction foment those inferior parts Nights and Mornings, to the end they may as much as possible be strengthen'd and confirm'd: I say as much as possible, because there is no probability that they can ever be reduc'd to the same Estate they were in before she had Children. So much

much for this: We'll now pass to convenient Remedies for the Belly of a new laid Woman.

All Authors do appoint, immediately after Delivery, the Skin of a black Sheep flea'd alive, for this purpose, to be laid all over her Belly, and to lie on four or five Hours; others will have a Hare-Skin. Truly, I believe that by reason of the natural Heat of such Skins, the Remedy is not bad; but I also fear lest in some small time after it may do the Woman more hurt than good, and that by its Moistness, cooling of her, it may make her chill, which would be very prejudicial in stopping her Cleansings, which ought to flow. Besides, it is a Remedy of too much trouble; for there must always be a Butcher ready for every Woman that is laid, or some other Person who can do it as readily, who must be for this purpose in the very Chamber, or at least in the House, that so they may have the Skin very hot, according to Directions.

They likewise direct a small Plaister of *Galbanum*, with a little Civet in the middle, to be apply'd to the Woman's Navel, which, as they imagine, is very proper to keep the Womb in its Place, because being delighted with that Smell, it draws near to it of its self; but this Remedy is a little superstitious *: wherefore I am not for it, it being sufficient to keep the Belly very warm, in the Situation we have directed, and to prevent the least Cold.

* *Practice and Success commends it, nor is there Reason wanting to defend it; wherefore, notwithstanding the Author's Sense, it may be successfully continu'd.*

As for Swaths convenient to a Woman new laid, they need not be us'd the first Day, or at least but very loosely, especially when there hath been a hard Labour; because the least compression of the Woman's Belly, which is then very sore, as the Womb also is, having been much haras's'd, proves a great Inconveniency to her: wherefore let her not be swath'd until the second

cond Day, and that very gently at the Beginning. Midwives believe that they ſerve inſtead of a Bolſter, as well for the keeping the Womb up in its Place, as to ſqueeze out from all Parts the Cleanſings, which are neceſſary to be evacuated: And Nurſe-keepers, abus'd with this Belief, do ſometimes ſwathe their Bellies ſo ſtrait, that they bruiſe the Womb, which is very painful in the Beginning of Childbed, and from whence often follow very dangerous Inflammations.

Theſe Swaths and Bolſters can have no hold to ſupport the Womb, as they imagine; foraſmuch as its * Fund, which is the principal Part, being ſlitting in the Cavity of the † *Hypogaſter*, cannot be kept ſtable and firm by that which is apply'd upon the Belly; and beſides, the Interpoſition of the Bladder which is upon it, will not permit it.

* *Bottom of the Womb.*
† *Lower Belly.*

As to their Opinion, that ſuch Swathings help to cleanſe the Womb, 'tis fit they ſhould be diſabus'd of this Error: For it is not the ſame thing in theſe Cleanſings, as preſſing the Juice out of boil'd Meat in a Napkin; for theſe are wholly a Work of Nature, which a ſtrong Compreſſion (inſtead of helping) hinders, by the Pain it cauſes to the Womb, and the Inflammations which follow. Without dwelling then upon the ordinary Manner of Swathing, let us be guided according to the Dictates of Reaſon, and not according to the Nurſe-keepers naughty Cuſtoms, whoſe Method is firſt to put upon the Belly a Swath four or five double, of a triangular Figure, to ſupport (as they pretend) the Womb, and ſometimes two other Rollers very ſtrait, on each ſide towards the Groin, to keep it in its place, leſt it be ſhaken, and incline more to one ſide than t'other, with yet another broad ſquare Swath for the whole Belly, which they put upon the firſt; afterwards they make a Swath, a Napkin folded two or three double, of the

the breadth of a quarter of an Ell, with which they do very much girt and compreſs the Belly.

I do very well approve of the Uſe of theſe Swaths, and of a good large ſquare Bolſter over the whole Belly, provided they be very looſe the firſt ſeven or eight Days, only to keep it a little ſteddy; obſerving in the mean time to take it off, and remove it often, to anoint the Woman's Belly all over (if it be ſore, and that ſhe have After-Pains) with Oil of ſweet Almonds and St. *John*'s Wort mix'd together, which may be done every day: But after that time, they may by degrees begin to ſwathe her ſtraiter, to contract and gather together the Parts, which were greatly extended during her going with Child, which may be then very ſafely done; becauſe the Womb by thoſe former Cleanſings is ſo diminiſh'd and leſſen'd, that it cannot be too much compreſs'd by the Swaths. Let us now ſee what is fit to be done to the Breaſts.

Proper Remedies may be apply'd to them to drive back the Milk, if the Woman will not be a Nurſe, of which we ſhall ſpeak hereafter; but if ſhe intends to nurſe, 'twill be ſufficient to keep her Breaſts very cloſe, and well cover'd with gentle and ſoft Clothes, to keep them warm, leſt the Milk curdle in them: and if there be danger of too much * Blood being carry'd thither, anoint the Breaſts with Oil of Roſes, and a little Vinegar beat together, and put upon them ſome fine Linen dipt in it; obſerving that if the Woman do ſuckle her Child, ſhe gives it not the Breaſt the ſame Day ſhe is brought to Bed, becauſe then all her Humours are extremely mov'd with Pains and Agitations of the Labour: wherefore let her defer it at leaſt till next Day, and it would be yet better to ſtay four or five Days, or longer, to the end the great Conflux of the Milk, and the Abundance of Humours which flow to the Breaſts in the beginning, may be ſpent, in which time another Woman may give it ſuck.

* *Rather Lympha.*

ſuch. Let us now diſcourſe of a fit Diet for the Woman to uſe during her whole Child-bed.

CHAP. III.

What Diet a Woman in Child-bed ought to obſerve during the whole time of her Lying-in, when it is accompany'd with no ill Accident.

ALTHO' a Woman be naturally deliver'd, yet notwithſtanding ſhe muſt obſerve a good Diet, to prevent many ill Accidents, which may happen to her during her Child-bed: at the beginning of which ſhe muſt be directed in her Meat and Drink, almoſt as if ſhe had a Fever, that ſo it may be prevented, in as much as ſhe is then very ſubject to it; ſo likewiſe it often happens to her thro' the leaſt Neglect committed towards her in her tending.

For this Reaſon one muſt not be of the Opinion of many Nurſe-keepers, who will have a new laid Woman to be well fed, as well to reſtore her loſt Strength, by the tediouſneſs of the Labour, and by the Quantity of Blood then evacuating; for which Cauſe they believe the Woman muſt be well nouriſh'd to make more Blood, as alſo to fill up her Belly, which is very much emptied by the Birth of the Child: but it is much better to follow in this the Counſel which *Hippocrates* gives us in his tenth Aphoriſm of the ſecond Book, where he ſays, *Impura corpora quo plus nutriveris, eo magis læſeris*; the more you nouriſh impure Bodies, the more you hurt them. * Now it is certain, that a Woman newly deliver'd is of this ſort, as you may know by the quantity of Cleanſings and Superfluities which flow from her

* *Did not this Impurity lie in her Body before Labour.*

her Womb at this time, when for this reason they must be very regular in their Diet, especially the three or four first Days; in which time she must be nourish'd only with good Broths, * new laid Eggs, and Jellies, without using at the beginning more solid Meats; but when the great abundance of her Milk is a little past, she may with more Safety eat a little Broth at her Dinner, or a small † piece of boil'd Chicken, or Mutton, as she likes best; afterwards, if no Accident happens, they may by degrees nourish her more plentifully, provided in the mean time, that it may be a third part less than she was accustom'd to take in her perfect Health, and that her Food be of good and easy Digestion; not suffering her to eat any of those Cakes, Tarts, or other Pasteries, which are usually provided at the Child's Baptism. As for her Drink, let it be *Ptysan* [*which is Liquorish, Figs, and Aniseeds boil'd in Water*] or at least boil'd Water, being careful not to give it her too cold: she may also (provided she be not feverish) drink a little White-Wine, well mix'd with Water, but not till after the first five or six Days.

* *Not to be commended.*

† *So she may the first Day.*

Altho' I prescribe this Rule in general for all those who are newly brought to Bed; yet there are some who must not observe it so exactly as laborious Women, who being of a very strong and robust Constitution, require a more plentiful Feeding; to whom notwithstanding, if they do not change the Quality, they must at least retrench the Quantity of their ordinary Food, having always respect to what every Person accustoms her self to: which the same *Hippocrates* doth likewise teach us in the 17th Aphorism of the first Book, where he saith, *Animadvertendi sunt quibus semel aut bis, & quibus copiosior, aut parcior aut per partes Cibus est offerendus; dandum vero aliquid tempori,*

pori, regioni, ætati, & consuetudini. "Great care "and notice must be taken to whom to give Meat "once only, or twice; as also to whom to give more, "or to whom less, or by little and little: but some "allowance must be made in respect of Time, "Country, Age, and Custom. What we have already said, shall suffice for Direction in their Meat and Drink.

The Child-bed Woman must likewise keep her self very quiet in her Bed, lying on her Back, with her Head a little rais'd, and not turning often from side to side, that so the *Matrix* may be the better settled in its first Situation: she must free her self at that time from all care of Business, leaving it to the Management of some of her Kindred or Friends. Let her talk as little as may be, and that with a low Voice; and let no ill News be brought to her, which may affect her; because all these Things do cause so great a Commotion, or Perturbation of the Humours, that Nature not being able to overcome them, cannot make the necessary Evacuation of them, which hath been the death of many.

The Citizens Wives have a very ill Custom, which they would do very well to refrain, that is, they cause their Children to be baptiz'd the second or third Day after their Labour; at which time all their Relations and Friends have a Collation in the Child-bed Room, with whom she is oblig'd to discourse, and answer the Gossips, and all Comers a whole After-noon together, with the usual Compliments of those Ceremonies, enough to distract her; and tho' there is scarce any of the Company which do not drink her Health, yet by the noise they make in her Ears, she loses it. Besides all this, she is often constrain'd, out of respect, to forbear the use of her Bed-pan, and other Necessaries, which are very prejudicial to her: and this happens just at the time when she ought to have most Rest; because about the third Day the Milk

Milk flows in greateſt quantity to the Breaſts; this is the Reaſon why ordinarily the next Day they have a great Fever. She ought always to keep her Body open with Clyſters, taking one once in two Days; which not only evacuate the groſs Excrements, but alſo by drawing downwards, cauſe her to cleanſe the better. When ſhe hath obſerv'd this Rule a Fortnight or three Weeks, which is very near the time of having cleans'd ſufficiently, that thoſe Parts may be thoroughly cleans'd before ſhe goes abroad, and begins upon a new Score; let her take a gentle Purge made of *Senna*, *Caſſia*, Syrup of *Succory*, with *Rhubarb*, which is good to purge the Stomach and Bowels of thoſe ill Humours Nature could not evacuate by the Womb, as it did the other Superfluities. This Purge may be repeated, if neceſſary: all which being done, and that no Indiſpoſition remain, ſhe may bathe once or twice, or waſh and cleanſe her Body; and afterwards ſhe may govern her ſelf according to her former Cuſtom.

CHAP. IV.

How to drive back the Milk in thoſe Women who are not willing to give ſuck.

THERE are many Remedies us'd to this purpoſe, ſome of which hinder the afflux of Humours to the Breaſt, and others diſſipate, and in part diſſolve the Milk therein contain'd.

Thoſe which hinder the Humours from plentifully flowing thither, are Oil of Roſes well mixt with Vinegar, with which the Breaſts are to be anointed all over; or *Unguentum Populeum*, with *Ceratum refrigerans Galeni*, equally mixt and extended upon a piece of Linen, or gray Paper, and ſo apply'd to the Breaſts. Others uſe Linen dipt in luke-warm

Ver-

Verjuice, in which a little Allum is dissolv'd, that so it may be more astringent; and others lay to them the Lees of Red Wine alone, or mixt with Oil of Roses.

Those Remedies which dissolve and dissipate the Milk from the Breast, is a *Cataplasm* of the four * Meals, Honey, and Saffron boil'd with the Decoction of Chervil or Sage.

* *Of Linseed, Fenugreek, Beans, and Fitches.*

Others apply Honey only, and some others rub the Breast alone with Honey, and put upon it the Leaves of Red Cabbage, the great Stalks first being taken away, and they a little deadned before the Fire; this Remedy doth very readily drive away the Milk.

There are some who boil Sage and Box Leaves in Urine, with which they do foment the Breasts pretty warm, and lay a Cloth upon them dipt in it. But great care must be taken in the Application and Change of these things, that the Woman catch not the least Cold; as also that no Inflammation or Impostumation be caus'd, instead of driving back the Milk: Wherefore such Remedies are to be chosen as are restraining, repercussive, or resolving, according to the different Dispositions requir'd.

I know some Women who hold it for a very great Secret, and most certain and fit to drive the Milk effectually back; and that is to put on her Husband's Shift yet warm, immediately after he had taken it off, and wear it until the Milk be gone: but in case the Milk doth in the mean time vanish, 'tis superstitious to believe that this Shirt is the cause of it, and that it can produce such an effect; it happens rather, because all the Humours of the Body of their own accord taking another course than to the Breasts, do not daily flow in so great abundance to them. Wherefore in the use of all these Remedies, the principal must not be forgotten, which is, to take care that they tend downwards, procuring to

that

that purpose a good and ample Evacuation of the * *Lochia*, which is much further'd by keeping the Belly open by Clysters provoking them, in doing whereof the Milk will soon vanish.

* *Cleansings.*

All that we have said in the former Chapters of this Third Book, is only to be observ'd when the new-laid Woman hath no manner of Indisposition: for in case that any happen, she must be govern'd in another manner, and according as the Accidents require, of which we intend now to treat in the following Chapters.

CHAP. V.

Of several Diseases and Symptoms which happen to a Woman new-laid, and first of Flooding.

WE have elsewhere mention'd the Flooding which preceeds Labour, and shew'd the only means to remedy it, which is to deliver the Woman as soon as possible: let us now see what is fit to be done to that which happens immediately, or in a little time after, proceeding from the late opening of the Orifices of the Vessels of the Womb, by the loosening of the *Secondine* which cleav'd to it. This Blood flows then so much more abundantly, by how much it is subtiler and hotter, or by the Agitation of a long and hard Labour, and besides, when a Woman is Sanguine or Plethorick.

This Accident may often happen by a too sudden or violent pulling away of the After-burden, and sometimes from some part of it being left behind in the Womb, or else some false Conception; which then endeavouring to expel, it presses and forceth forth the Blood out of the Vessels newly open'd: and

ſometimes a great Clod of Blood remaining in the bottom of the Womb will produce the ſame effect; which by reaſon of the diſtention it often cauſes, excites Pains like to thoſe a Woman endures before Labour, and doth not ceaſe tormenting her, until ſhe hath voided it, and then ſhe is at eaſe. But ſometimes the Blood continuing ſtill to flow, and remaining in the bottom of the Womb, becomes new Clods; which is the cauſe why the Accident renews again as before, and continueth ſo by fits, in the Intervals of which there come away ſome Seroſities of the Blood retain'd, which diſſolves; and makes ſome Perſons, ignorant of the Art, think that the Flux is ſtopt, altho' it ſtill continues flowing within, where it ſtops only by ſome Blood ſo coagulated: but when this Clod comes away, the Flooding begins again, pure Blood, and in great abundance.

Flooding is a more dangerous Accident than any other which may happen to a Woman newly laid, and which diſpatches her ſo ſoon, if it be in great quantity, that there is not often time to prevent it. Wherefore in this Caſe convenient Remedies muſt be ſpeedily applied, as well to ſtop it, as to turn it back from the places whence it flows.

To which purpoſe 'tis fit to conſider what cauſeth this Flooding: and if it be a falſe Conception, piece of the Burden, or clodded Blood remaining behind, all Diligence muſt be us'd to fetch them away, or to cauſe a ſpeedy Expulſion of them; but if when nothing remains behind in the Womb, the Blood doth notwithſtanding continue to flow, you muſt bleed the Woman in the Arm, not ſo much thereby to empty the Fulneſs, as to make Diverſion. Let her Body be laid equally flat, and not rais'd, that ſo the Blood may not be ſent down to the lower Parts; let her keep her ſelf very quiet, without turning from ſide to ſide, that ſo the Humours may not be ſtir'd, the upper part of her Belly muſt likewiſe not be

ſwath'd

ſwath'd or boulſtred, for ſuch ſtraitneſs augments the Evil; let her Chamber be kept a little cool, and let her not be too warm cover'd in her Bed, that ſo the Flooding, thro' Heat, may not be continu'd. All the World forbids Clyſters in this caſe, leſt, as they ſay, the Humours be drawn down in great abundance; but I have twice experimentally found the contrary, where great Floodings have been ſtopt by Clyſters, of which I will give you a particular Account, that ſo it may be uſeful on the like Occaſion.

I was three Years ſince call'd to a Woman, who was ſurpriz'd with a very great Flooding immediately after the Midwife had deliver'd her, which ſhe had done with too much Violence, as the good Woman aſſur'd me; who told me, ſhe felt a very great Pain at the inſtant ſhe pull'd away the After-birth, and that ſhe perceiv'd at the looſening of it a crack. Now, from the moment that ſhe was ſo deliver'd, ſhe loſt, for five or ſix Days continually, ſo great abundance of Blood, that I could ſcarce believe ſhe could, without dying, had I not ſeen it my ſelf: during all this time they, to no purpoſe, us'd all the means they could imagine to ſtop this Accident; and becauſe with it ſhe complain'd of great Pains in her Belly, they gave here *Anodyne* and cooling Clyſters, for fear leſt giving her others more ſtrong, the Flooding would be more and more excited. She had thus taken four or five Clyſters, which came away as they were given, without any Excrement: which ſeeing, and judging that aſſuredly ſome groſs Excrement (being retain'd in the Inteſtines from before the time of her Labour, which could not be evacuted by theſe *Anodyne* Clyſters) did cauſe ſo great a Cholick, which ſhe felt all over her Belly, which appear'd puft up; I caus'd her to take one common and one pretty ſtrong Clyſter, contrary however to the opinion of moſt Perſons; who not knowing the cauſe of the Diſtemper, bad me have a care leſt it ſhould, as they

ſaid, cauſe a greater flooding: but the Iſſue of it was quite otherwiſe than they expected; for the good Woman voided with this Clyſter, a Pan full of groſs Excrements, which having ſtaid there a long time, and being thereby harden'd, had ſtop'd the Paſſage of much Wind, which paſs'd away at this time. Now the Inteſtines full of this groſs matter, being every moment agitated by this Wind, did likewiſe agitate and continually compreſs the Womb, by means of which the Flooding was always maintain'd, which did ceaſe immediately after this Cholick was diſſipated by the Evacuation of theſe Excrements: and ſince that time, being again call'd upon the like occaſion, of loſs of Blood proceeding from the ſame cauſe, and having taken the ſame courſe, the Iſſue of it was likewiſe the ſame. Wherefore if there be the leaſt appearance of Excrements contain'd in the Inteſtines, make no ſcruple to give Clyſters, to evacuate them, forbearing in this caſe thoſe that are aſtringent, becauſe they harden and retain yet more that which augments the Diſtemper.

But if notwithſtanding all this, the Blood flows continually, then the laſt Remedies muſt be try'd, which is to lay the Woman upon freſh Straw, with a ſingle Cloth upon it, and no Quilt, that ſo her Reins may not be heated; applying along her Loins Clothes wet in cool * *Oxycrate*, provided it be not in the Winter; for then it muſt be a little warm'd. By this refreſhing the Impetuoſity of the Blood will be a little ſtop'd, and the Heat of it qualify'd; as alſo by this means, that little of it which remains in the Woman's Body ſhall be concentred towards the principal part: and to the end her Strength may be preſerv'd, which is extremely waſted by the Evacuation of this Treaſure of Life, let her take every half hour a little good ſtrong Broth, with a few Spoonfuls of Jelly, and between whiles the Yolk of a new-laid Egg, without giving her

* *Vinegar and Water.*

her too much Food at a time, becauſe her Stomach cannot digeſt it; and let her Drink be red Wine, with a little Water wherein Iron hath been quench'd. But if notwithſtanding all this, the Blood continues flooding, then the Woman will have often Fainting-Fits, and be in great danger of loſing her Life; becauſe one cannot apply in thoſe Places the Remedies fit to ſtop the opening of the Veſſels, as we can in another.

Theſe three Figures repreſent ſeveral Peſſaries fit for the ſupporting and keeping up of the Womb, that it may not fall out, as it doth in a bearing down or forth of the Body.

CHAP. VI.

Of the Bearing down, and Falling out of the Womb, and Fundament of a Woman new-laid.

I Shall, the better to explain the thing, ſpeak of two ſorts of Bearings down or Relaxations, as alſo two ſorts of Fallings forth, or Precipitations of the Womb; all which differ but in the degree, according as they fall down more or leſs: for the Relaxation is, when the Womb only bears down and comes not forth: and the Precipitation is, when it comes out of the Body.

The firſt ſort of Bearing down, is that in which the whole Body of the Womb falls into the *Vagina*, in ſuch manner, that putting up the Finger, one may feel the Orifice very near. The ſecond ſort of Bearing down is, when the Womb being yet lower, one can manifeſtly perceive this Orifice quite without.

The Falling out is alſo of two ſorts: In the firſt the Womb comes quite forth, but is not turn'd in-

side out; nor can the inside of it be seen, but only its Orifice, which appears at the end of a great fleshy Mass, which makes the Body of the Womb: and this is call'd *Prolapsus Uteri*, that is, a falling forth of the Womb. And the other Falling out, of all is most dangerous, and is call'd *Perversio*, or turning inside out; for then it is not only fallen forth, but the bottom of it is turn'd quite out, that so you may perceive it all even, and without an Orifice, because it is so turn'd. The Womb turn'd on this fashion, appears to be only a great piece of bloody Flesh (and almost like the * *Scrotum*) which hangs between the Woman's Thighs; and that which is wonderful in this Case is, that the Infant's House, which is the Womb, goes forth at the Gate, which is the inner Orifice.

* *A Man's Cod.*

The Bearing down of the Womb proceeds either from a Relaxation or Ruption of the Ligaments: Women that have abundance of the Whites, are subject to these Relaxations; and the Ligaments are extended or broken by hard and violent Labour, as also by too frequent bearing of great and heavy Children; sometimes by a great Cough, by strong and frequent Sneezings, or having leap'd or fallen from high Places, by going in a Coach, Cart, on Horseback, or in other rude and shaking Carriages; by having lifted up beyond their strength heavy Burdens, by lifting up the Arms too much, and putting them over the Head; by a tedious Loosness, with great Pains and Needing: forasmuch as all these things do shake and extremely thrust the Womb downwards when it is with Child; and the Ligaments being by this means loosen'd or broken, cannot keep it up any longer, which is the Cause that a bearing down doth easily follow the Birth of a Child. But the most ordinary Cause of these Bearings down, or Fallings out of the Womb, is violent and hard Trayails, which usually happen when a Child comes wrong,

wrong, ſo that it cannot be born; and when it hath too big a Head, or when the inner Orifice is not dilated ſufficiently to give it paſſage at that time; for the Womb is then forc'd down with ſo much Violence, and yet the Child cannot advance into the Paſſage, becauſe the Ligaments are extremely rent or looſen'd: and likewiſe when the *Secondine* cleaving cloſely to the bottom, the Womb is pull'd away of a ſudden, or with too much violence; and much the ſooner, if that putting up the Hand into it (as it is neceſſary when the String is broke) one takes hold and pulls the Body of the Womb it ſelf, inſtead of the After-Birth. We have, in the 13th Chapter of the ſecond Book, given ſuch Directions as will prevent this Miſtake, and bring it away ſafely.

A Woman troubled with this falling out of the Womb, feels a great weight at the bottom of her Belly, with an extreme Pain in her Reins and Loins towards the Place where theſe Ligaments are faſtned; and a reddiſh Blood Moiſture is perceiv'd to paſs thro' this Maſs of Fleſh which hangs between her Legs. A Relaxation may happen to all ſorts of Women from any of the Cauſes above-mention'd, but a falling out but ſeldom, and a perfect Perverſion never but upon a Delivery, or immediately after; becauſe then the inner Orifice is almoſt as wide as the bottom of it, which is not ſo at other times, when being clos'd, there is no poſſibility for it to be thus turn'd inſide out. I have ſhown in the 16th Chapter of the ſecond Book, how to prevent this Accident at the time of Labour in a Woman who is ſubject to it: to which place you may have recourſe, to avoid repetition.

If a ſpeedy Remedy be apply'd to the Relaxation, and Falling out of the Womb, by reducing and remitting it into its natural Place, a Cure may be eaſily expected; and ſo much the rather, by how much the Woman is young, and the Malady freſh: but if

she be old, and this Disease be already of a long standing, she is so much the more incurable.

For the Cure of this Distemper, regard must be had to two things; the first is, to reduce the Womb into its natural place; and the second is, to strengthen it, and keep it there.

For the execution of the first, which is to reduce it, if the Womb be quite out, or turn'd, the Woman must first of all be made to render her Urine, and a Clyster must be given her, if it be necessary, to empty the gross Excrements that are in the *Rectum*, that so the Reduction may be the easier perform'd: then place her on her Back, with her Hips rais'd a little higher than her Head; and then foment all that is fallen forth with a little Wine and Water luke-warm; and having taken a soft Rag, put it up into its proper place, thrusting it back, not all at once, but wagging it by little and little from side to side: and in case this be too painful, because it is already too big and swell'd, anoint it with Oil of sweet Almonds, for the more easy reduction of it; being careful, as soon as it is reduc'd, to wipe off the Oil as much as may be, to avoid a Relapse. But if notwithstanding all this the Womb cannot be put up, because it is very much inflam'd and tumefy'd, which happens when it hath been a long time so, without the use of necessary means, during which time it is continually moisten'd with Urine and other Excrements, which contribute very much to its Corruption; in this Case there is great danger that it will gangreen, and be afterwards the Death of the Woman. There have however some Women escap'd this Accident; *Pareus* recites the History of such an one, which *Rousset* doth also amongst his *Cæsarean* Births: but this happens very rarely.

As to the second Part of this Cure, which consists in the retention of the Womb in its place, and the strengthening of it so reduc'd, it will be done by a conve-

convenient Situation. Let the Woman for this purpose keep her self in Bed on her Back, having her Hips a little rais'd, her Legs something cross'd, and her Thighs join'd together, to prevent the falling of it out again; but the best way is to put up a Pessary into the Neck of the Womb, to keep it firm. There are two or three sorts made for this purpose, the several Figures of which are at the beginning of this Chapter. Some are round and a little longish, of the figure of an Egg, and of the length and bigness of the Neck of the Womb, where it must be left after it is introduc'd into it: but these are often subject to fall out again, and are not so useful and convenient as the other, which are made of a piece of Cork, that they may be light. They ought to be of a thick circular figure, like to a small Wreath, and pierc'd with a pretty big Hole in the middle; which serves as well for the lodging, supporting and receiving of the inner Orifice of the Womb, as for the giving passage to the superfluous Humours, which are thence evacuated. These kind of Pessaries must be cover'd with white Wax, that they may be more smooth, and incapable of hurting the Woman who useth them: they must be pretty large, that they may be the easier kept when they are up: they may also have a small String fasten'd to them, to pull them out at any time to clean. But this String is not so very necessary, because they may be easily enough taken out with one Finger. They may be made some of them exactly round, and others something of a square Figure, or triangular: the Corners must be rounded or blunted. These sometimes hold better, and fall not so easily forth as the round; but either the one or the other may be us'd, as shall be thought most fit.

During the flowing of the *Lochia* from the Womb, nothing else must be us'd to strengthen, but only to keep it so in its natural place; for astringent Remedies,

dies, proper for the prevention of the Relaxation of it, will very much prejudice the Woman, by stopping of these Evacuations: and above all it must be observ'd in this Distemper, that the Woman's Belly be not strait swath'd any more than for a stay only; in which many Midwives are deceiv'd, believing they keep it the better in its Place, by how much they swathe the Belly the straiter, for by this strong compression of it they force the Womb yet more down. She must use the Bed-pan in Bed, and lie along, if possible, when she goes to Stool, keeping her Hand all the while on the bottom of her Belly, to bear it up. But when the time of her Purgation is fully over, and that she hath cleans'd very well, astringent Injections may be then us'd without danger. Respect must likewise be had to the whole habit of the Body, to dry up the Humours by an universal Course; and the Woman must not rise out of her Bed in at least five or six Weeks time, that so the Womb and its Ligaments may be restor'd and fortify'd in their natural Situation.

It happens also sometimes, that by the great Throws the Woman endures at her Labour, the Fundament falls quite out. In this Case, if the Child be very forward in the Passage, 'twill be sufficient, before this Accident happens, to hinder it, if possible, perswading the Woman not to help her Throws so strongly; but if it be already fallen down, they must stay till the Child be born e'er it can be put up, for before that it will be difficult to do, without much bruising the Intestine. As soon then as the Woman is deliver'd, let it be reduc'd in the same manner as that of the Womb, after having fomented, bath'd and anointed it, if necessary; forbearing afterwards, during her Child-bed, the giving of her Clysters, because the force she useth in rendring of them, will again cause the falling down of the Fundament.

CHAP.

CHAP. VII.

Of the Bruiſes and Rents of the outward Parts of the Womb, caus'd by Labour.

IT is no wonder, that often, and eſpecially in firſt Labours, there happen Bruiſes and Rents in the lower Parts of a Woman; the Cauſe of which is eaſily known, if the bigneſs of the Child's Head be but conſider'd, which muſt needs make a great diſtention of thoſe ſtrait Parts, by paſſing and coming forth of the Womb: which Parts, being thereby extremely preſs'd againſt the hardneſs of the Bones that ſurround it, are eaſily bruis'd; and when they are not able to be ſufficiently dilated, they muſt neceſſarily be torn aſunder.

Almoſt all Women in their firſt Labours do very much complain when the Child is in the Paſſage, that the Midwives prick and ſcratch thoſe Parts; and do believe that the Hurts and Bruiſes which are there after Labour, do happen becauſe the Midwives handled them too roughly: but they are very much miſtaken, for this comes becauſe the Child's Head in paſſing makes a violent diſtention and ſeparation of the four Caruncles, and other adjacent Parts which are bruis'd, and ſometimes rent by it; from hence ſpring the Pains of which they then complain, as if they were prick'd and ſcratch'd, whereof they are never after ſenſible in their following Labours, becauſe thoſe Parts having once given way to an Infant, are ever after very eaſily relax'd and extended, and every Travail with leſs Pain than other.

Theſe Contuſions and Rents muſt never be neglected, leſt they degenerate into malignant Ulcers; for the Heat and Moiſture of theſe Parts, beſides the Filth which continually flows thence, doth eaſily contribute

tribute towards it, if convenient Remedies be not timely apply'd: Wherefore as soon as a Woman is laid, if there be only simple Contusions and Excoriations, apply the Cataplasm, formerly directed, to those lower Parts, to ease Pain, made of the Yolks and Whites of new-laid Eggs, and Oil of Roses, seeth'd a little over warm Embers, continually stirring it till it be equally mixt, and then spread upon fine Cloth, it must be apply'd very warm to the Bearing-place for five or six hours; when, being taken away, lay some fine Rags dipt in Oil of St. *John*'s Wort on each side the Bearing-place, and renewing them twice or thrice a day, foment these Parts with Barley Water, and Honey of Roses, to cleanse them from the Excrements which pass: and when the Woman makes Water, let them be defended with fine Rags, to hinder the Urine from causing Smarting and Pain by touching them.

Sometimes the Bruises are so great, that the Bearing-place is inflam'd, and a very considerable Abcess follows, which I have met with: in which Case it must be open'd just below the Swelling, in the most convenient place; and after the Matter is evacuated, a detersive Injection must be injected into the Cavity, with the same Fomentation above-mention'd, *viz.* Barley-Water and Oil of Roses, which may be a little heighten'd with Spirit of Wine, if there be any danger of Corruption; and afterwards the Ulcer must be dress'd according to Art.

But sometimes it happens by an unlucky and deplorable Accident, that the *Perinæum* is rent, so that the Privity and Fundament is all in one. If it were so let alone without Re-union, the Woman afterwards happening to be with Child, would indeed be deliver'd with more Ease, and without danger of suffering the same again, as is usual when heal'd after such an Accident; but if it remains in this manner, 'tis so great an Inconvenience, that her Ordure comes both

both ways. Wherefore having cleans'd the Womb from such Excrements as may be there, with red Wine, let it be strongly stitch'd together with three or four Stiches or more, according to the length of the Separation, and taking at each Stitch good hold of the Flesh, that so it may not break out; and then dress it with an agglutinative Balm, such as is *Linimentum Arcei*, or the like, clapping a Plaister on, and some Linen above it, to prevent as much as may be the falling of the Urine and other Excrements upon it, because their Acrimony would make it smart, and put it to pain: and, that these Parts may close together with more ease, let the Woman keep her Thighs close together, without the least spreading, until the Cure be perfected. But if afterwards she happen to be with Child, she will be oblig'd, to prevent the like Mischief, to anoint those Parts with emollient Oils and Ointments; and when she is in Labour, she must forbear helping her Throws too strongly at once, but leave Nature to perform it by degrees, together with the help of a Midwife well instructed in her Art, who being warn'd by the first Disgrace, will do her best to avoid a second: for usually when these Parts have been once rent, it is very difficult to prevent the like in the following Travail, because the Scar there made doth straiten the Parts yet more: wherefore it were to be wish'd, for greater Security against the like Accident, that the Woman should have no more Children.

Now, if by neglecting such a Rent, the Lips of it be cicatriz'd, and the Cure be then desir'd, you must with a good pair of Scissers cut off those Scars in the same manner as is done in a Hare-Lip; and it must afterwards be dress accordingly, or as if it newly happen'd.

CHAP.

CHAP. VIII.

Of After-Pains which happen to a Woman new-laid, and of their ſeveral Cauſes.

THE moſt common Accident that uſually troubles moſt Women during their lying in, is After-Pains.

We have formerly ſhew'd how they are accuſtomed to be prevented, in giving the Woman immediately after ſhe is laid two Ounces of Oil of ſweet Almonds, drawn without Fire, with as much Syrup of Maiden-Hair. But ſince notwithſtanding this Remedy the Woman is much pained in her Belly, let us enquire what may be the Cauſe of all theſe Gripes, which are uſually call'd without diſtinction, After-Pains, and are ſometimes felt about the Reins, Loins, and Groins; ſometimes in the Womb only, and ſometimes about the Navel and all over the Belly; either continually, or by fits with ſome Remiſſion; in a certain place, or ſometimes on one ſide, and ſometimes on another: all which Reflections teach exactly their ſeveral Cauſes, and accordingly the Remedies muſt be vary'd.

The Pains of the Belly for the moſt part proceed from one only of theſe four Cauſes, or ſeveral of them together. The firſt is by Wind contain'd in the Bowels, by which they are eaſily fill'd after Labour, as well becauſe they have more room to dilate them when the Child was in the Womb, by which they were compreſt, as alſo becauſe the Nouriſhment and Matter contain'd as well in them as in the Stomach, have been ſo confus'd and agitated from ſide to ſide, during the Pains of Labour, by the frequent Throws which always much compreſs the Belly, that they could not be well digeſted: whence this Wind is afterwards

terwards generated, and conſequently the Gripes which the Woman feels running in her Belly from ſide to ſide, according as the Wind moves more or leſs, and ſometimes alſo towards the Womb, becauſe of the Compreſſion and Commotion which the Bowels make, being extremely thereby agitated.

The ſecond Cauſe of theſe Gripes, which torments the Woman as much as the former, is that which proceeds from ſome ſtrange Body reſting in the Womb after Labour, which it endeavours to expel by continual Throws. It is ſometimes a falſe Conception, or a piece of the Burden, and very often clodded Blood which cauſes this Torment, and never ceaſes till what is ſo contain'd in the Womb be come away. Theſe Pains are very like the ſame that a Woman endures before ſhe is deliver'd, and are not abated by Clyſters, as thoſe are that proceed from Wind; but on the contrary are rather thereby excited and augmented.

Thirdly, Theſe Pains are often caus'd by the ſudden Suppreſſion of the * *Lochia*, which abundantly filling the whole Subſtance of the Womb, cauſeth a great Diſtention, and by its long ſtay an Inflammation, which is communicated by means of the *Peritonæum* to all the Parts of the lower Belly, by reaſon whereof it ſwells, and is extended, and grows extremely hard; which Accident continuing, very often kills the Woman in a ſhort time after.

* *Childbed Cleanſings.*

The Fourth and Laſt Cauſe of theſe Pains, is the great extenſion of the Ligaments of the Womb, by reaſon of a hard Labour; here they remain more fix'd about the Reins, Loins and Groins, than any other Part, becauſe they are Places where theſe Ligaments are faſtned: however theſe Pains do ſometimes communicate themſelves by Continuity to the whole Womb, and the rather when it hath been bruis'd by a violent Labour.

'Tis

'Tis commonly held, that a Woman is not troubled with theſe Pains ſo much of her firſt Child, as of the following; but daily Experience confirms us, that it happens indifferently, according as the preſent and various Diſpoſitions contribute to it, either more or leſs, there being no certain Rule in reſpect either to firſt or laſt Labours.

All theſe Pains muſt be cur'd according to their ſeveral Cauſes; and to prevent thoſe which we ſay are excited by Wind, give the Woman, immediately after Delivery, Oil of ſweet Almonds, and Syrup of Maiden-Hair mix'd together: Some do more eſteem Oil of Walnuts, provided it be made of good Nuts, but this hath a worſe Taſte than the other. This Remedy ſerves to lenify and line the inſide of the Inteſtines with its Unctuouſneſs, by means whereof that which is contain'd within them paſſes away the eaſier; but as we have ſaid elſewhere, this Mixture is ſo nauſeous, that it doth often for that reaſon more hurt than good: wherefore I prefer a good warm Broth for thoſe who have an averſion to the Oil. Others give half a Glaſs of good Hippocraſs, but that (in the Condition the Woman is in) may do more hurt, by cauſing a Fever. Now for the better preventing theſe kind of Pains, let the Woman keep her Belly very hot, and be careful not to drink her Drink too cold; and if they torment her very much, hot Clothes from time to time muſt be laid on her Belly, or a Pancake fry'd with Walnut-Oil may be apply'd to it, without ſwathing her Belly too ſtrait. And for the better evacuating the Wind out of the Inteſtines, give her a Clyſter, which may be repeated at often as Neceſſity requires; but if by this means the Pains of the Belly are not appeas'd, 'tis certain they are maintain'd by ſome other Cauſe.

If it be known that ſome ſtrange Body is retain'd in the Womb, the Expulſion of it muſt be procur'd, or it muſt be fetch'd away by putting the Fingers into

into the Entry of it, according to the Direction already given for the extracting of a falſe Conception: and if it be great Clods which (retain'd) do alſo cauſe theſe Pains, they will not only fail to ceaſe as ſoon as they are fetch'd away, but alſo the ſame Accident will return, if new Blood flows into the Cavity of the Womb, and coagulates there again, as it often happens; for it cannot endure to keep any thing in its Capacity after the Child's Birth.

If the Woman's Cleanſings be ſuddenly ſtop'd, which a little before came down in great abundance, you need not ſearch for any other Cauſe of the Pains ſhe endures; and the ſpeedieſt Remedy is to bring them down, which is effected by Clyſters that draw downwards, by hot and aperitive Fomentations to the Bearing place, and by bleeding in the Foot, preceded by that of the Arm, if the Caſe require it.

As to the Pains the Woman feels in her Loins and Groin, which come by reaſon of the greater Diſtention, or in part by a ruption of the Ligaments of the Womb thereabouts faſtned, Reſt alone, and a good Situation of the Body *, will be ſufficient to fortify and re-unite them without greater Medicines, becauſe they cannot be actually apply'd to the Part affected: always obſerving a good Diet; and not forgetting, in all theſe ſeveral ſorts of Pains, to provide for the natural Evacuation of the *Lochia*, for 'tis one of the principal Means to obtain a good Iſſue.

* *A Plaiſter to the Loins is of great Efficacy.*

CHAP. IX.

Of the Lochia *which flow from the Womb in Childbed. Whence they come, and the Signs when they are Good or Bad.*

I DO not find that Authors have ſo ſufficiently enquir'd into the Cauſe of the *Lochia* which are evacuated in Childbed, as to make us truly underſtand what they are; either in reſpect of their Nature, affirming it to be the Blood uſually purg'd away every Month before they were with Child, which being collected about the Womb, flows away when it opens after the Birth of the Child; or in reſpect of the Quantity of this Evacuation, and the length of time it ought to continue. *Hippocrates* in his Book, *De Natura Pueri*, would have at the beginning an *Hemine* and an half a Day: of which Meaſure, tho' common in his time, we have no certain knowledge; for ſome will have it to be our half Pint, others a Pint or thereabouts, and that they continue for a Male-Child thirty Days, for a Female forty, diminiſhing every Day by little and little, until there comes no more, and the Evacuation is compleated. *Galen* ſays that theſe *Lochia* are only vicious Humours, and the Reſidue and Superfluity of the Blood with which the Child was nouriſh'd in the Mother's Womb. But I will, as near as I can, here deſcribe to you the manner how I conceive this Evacuation to be made, and the reaſon why they diminiſh day by day, and change their Colour, Conſiſtence and Quality, according to the ſeveral times.

As ſoon as the Child is born, there flow away from the Womb at the ſame moment ſome wateriſh Humours, beſides thoſe which came away before at the breaking of the Membranes. Theſe Waters then

then are very often bloody, not that they are so by Nature, but because there is for the most part Blood mix'd with them; which coming from the Vessels of the Womb, because of the Agitation and Commotion they receiv'd in the Birth, become so reddish; but immediately after the Burden is completely loosen'd, then pure Blood flows away. And the reason why these *Lochia* flow freely, and are very red the first Day, is, because the Vessels against which the Burden was fasten'd in the Womb, are but newly open'd; but the Blood flowing by little and little in less abundance, because the greatest Plenitude hath been at first evacuated, doth clod in small Drops on the Extremities of all those Vessels, whereby they are stop'd, and then there comes away only the most serose Part of it; and therefore the *Lochia* begin the second and third day to be more pale and less colour'd, and after that the Colour of them is less bloody every day, as the Vessels close, until they are at length very pale: which happens when the Vessels being almost perfectly reunited, there distils only the mere Moisture of them, as also of the whole Substance of the Womb, thro' which a quantity of it doth likewise transude. Now these serose Humidities acquire by the Heat of these Places a Consistence somewhat thick, and that more or less, according as they come away in greater or lesser quantity, and according to the length of time they stay there. And then the *Lochia* do almost resemble in Colour and Consistence, troubled Milk, which makes the World believe it is Breast Milk, which is in that manner emptied downwards; but in truth it is an Abuse as great as common.

For my Part I know no other cause of this ordinary Change of the Colour and Consistence of the *Lochia*, nor of the diminution of their Quantity, than that which we daily find in the Suppuration of a great Wound somewhat incarnated: for as soon as the

Wound is firſt made, it bleeds freſh, and in good large quantity, becauſe the Veſſels are then open; but a little after, during the firſt and ſecond Days, it yields only bloody Seroſities: foraſmuch as ſome ſmall Portions of the Blood being clodded about the Mouths of the Veſſels, do in part ſtop them; and afterwards ſtopping them more, it yields a white * *Pus*, which proceeding from the Moiſture, ſweats thro' the Subſtance of the Fleſh, and of theſe Veſſels which have been but newly clos'd; and acquires a thick and whitiſh Conſiſtence by the Heat of the Parts, and the ſtay it makes there. Now the better to conceive this by a Compariſon, you muſt imagine that there is a kind of a Wound made by the looſening of the Burden from the Womb, by reaſon of which there happens, if it may be ſo ſaid, a kind of Suppuration, the *Pus*, and the Excretions of which are the *Lochia*.

* *Matter.*

They who believe that when the *Lochia* are pale, it is the Milk of the Breaſts, which flows by the Womb, judge ſo, becauſe the Milk uſually abates in proportion to this Evacuation; and ſay beſides, that by the Colour and Conſiſtency it muſt needs be Milk: but if they were acquainted with Anatomy, they would know that there was no Paſſage which hath to this purpoſe a Communication from the Breaſts to the Womb, unleſs they think it is done by means of this imaginary † *Anaſtomoſis* of the ‖ *Mamillary* Veins with the § *Epigaſtrick*; which cannot poſſibly be, becauſe neither of them have any tendency either to the Breaſts or the Womb, as Anatomy makes manifeſt: for the *Mamillar* comes from the *Subclavicular* under the *Sternum*, without yielding any *Sien* to the Breaſts, nor ſo much as touching them; and the *Epigaſtrick* ariſeth from the *Iliacks*, without having the leaſt Communication with the Womb.

† *The Communication of Veins without Arteries, whereby they help one another.*

‖ *Belonging to the Breaſts.*

§ *Belonging to the Flanks.*

Lan-

Laurentius, who knew very well it was for this reason impossible that Milk should pass from the Breasts to the Womb by this Passage, finds out another way, which is as far from the truth as the first. His Opinion, as he saith, is, that the Milk and Blood flow back from the Veins of the *Thorax*, which bedew the Breasts, to the *Axillary* Veins, and from thence to the Trunk of the *Vena cava*, by the Continuity of which they flow down into the *Hypogastrick* Branch, and from thence finally into the Womb: but besides that it would be very difficult for the Milk, after so long a way, to come forth without being perfectly mix'd with Blood, the Circulation of the Blood, which he knew not, shews us plainly that it is impossible, because it doth mount back by the lower Parts of the Body from the *Vena cava* to the Heart, without a possibility of carrying any thing into the Womb: whence it appears that he is as far as others from informing us how it can be done.

For my part I believe, and I think with much more reason, that it is not Breast-Milk which is thus evacuated by the *Lochia*, but this abundance and superfluous Humidity which distils from and transudes the Vessels and Substance of the Womb, as I have explain'd; by means of which the whole Habit of Body being much emptied, there remains not sufficient to be carry'd to the Breasts, and little or none flowing to them; that which is contain'd in them is dissipated by Transpiration, and digested by the natural Heat of the Parts. Now the Milk by this Evacuation is dry'd up, just as we see a Pond is that one would drain; out of which it is not absolutely necessary to let the Water run which fills it, but it sufficeth to turn back the Stream that feeds it, to another Place: which being done, and no more new Water falling into the Pond, it will soon be dry'd up, as well because the Water is dissipated in Vapours, as drunk in by the Earth which contains it. And for the same

reason when we see Milch-Nurses want their ordinary Courses, it is because that all the redundant Humours in their Body being sent to the Breasts, and empty'd by the sucking of the Infant, there remain no Superfluities for Matter for the Terms; and for this Cause it is not necessary that the menstrual Blood should be carry'd from the Womb to the Breasts, for Nurses Milk to be made of it, but it is enough that the Humours flow towards them, without going at all to the Womb. So likewise it is not necessary the Breast-Milk should be sent to the Womb, to be evacuated with the *Lochia*; it being sufficient that the Humours are drawn towards it, without going to the Breasts.

We must not think, as some imagine, that the Blood flowing after Labour is bad and corrupted, and the Relicks of that good which the Infant hath taken for his Nourishment, nor that it hath remain'd in and about those Places during the whole time of being with Child: for this Blood coming immediately out of the Vessels, open'd by the Separation of the Burden from the Womb, is the very same with all the rest of the Body, in which immediately after Labour no great change is observ'd, unless it be by so much alteration as the Disposition of the Place from whence it proceeds may cause, and according as it flows abundantly or slowly, and as it is mix'd with other Impurities which are empty'd at that time, or that it makes some stay in the Womb after it is out of the Vessels: and if it had so stay'd in and about the Womb, as some would have it, without Circulation, during the whole time of Pregnancy, 'tis most certain it would have putrify'd; even as we see the Water of a Lake, for want of Agitation and Motion, is infected and corrupted; but there is no other Superfluity nor Relick of the Child's Nourishment, but the gross Blood with which the whole Mass of the Secondine is repleniſh'd. After having

consider'd

conſider'd the Nature and Quality of theſe Evacuations, we ſay, that for their quantity and time of continuance there is no certain and particular Rule; for ſome Women have many a long time, and others but few, and of a ſhort continuance, which uſually happens according to the Seaſon, Country and Age, according to the Temperament more or leſs hot or moiſt, the Habit more or leſs replete, and according to the Veſſels remaining a long or ſhort time open. But in general this Evacuation is for the moſt part finiſh'd in fifteen or twenty Days, and ſooner or later according to the Circumſtances lately mention'd, and indifferently the ſame to a Woman deliver'd of a Boy or a Girl; during which time the *Lochia* diminiſh in quantity from day to day, until they totally ceaſe at the end of the ſame: afterwards the Parts remain yet ſomewhat moiſt without any manifeſt Evacuation, except in Women ſubject to the *Whites*.

This Diſcourſe muſt be underſtood of Labours at full time; for after a Miſchance, the leſs the *Fœtus* is, and the leſs time the Woman is gone with Child, the leſs ordinarily are her Evacuations.

The Signs when the *Lochia* are good and commendable, are, that they be freſh the three or four firſt days, and that they loſe this bloody Tincture by degrees, and become pale; that they be of an equal Conſiſtence, without any curdled or clodded Blood; that they have no ill Scent; that they be without Acrimony, and that they flow in a moderate quantity.

We ſay that they muſt not be freſh but the four firſt days, becauſe they will not elſe be the true *Lochia*, but a pure Flux of Blood, which will be very dangerous, and that they muſt loſe by degrees this reddiſh Colour to become pale. This Sign teacheth us, that the Veſſels, which have been open'd, are by degrees clos'd again, that they be of an equal Conſiſtence without curdled or clodded Blood: by this means we are aſſur'd that there is no mixture of any

strange Matter, and that they are govern'd and regulated by Nature: they must have no *Fœtor* or ill Scent, and be without Acrimony; in this Case we know that there is no danger of Corruption or Inflammation in the Womb: they must flow in a moderate quantity, that so the superfluous Humours may be evacuated; for if the *Lochia* flow in so great an abundance, as to cause Fainting or Convulsions, the Woman will be in danger of Death, as *Hippocrates*, in the 56th Aphorism of his 5th Book, assures us; *Si Muliebri profluvio convulsio & animi defectus superveniunt, malo est*: If, says he, Faintings and Convulsions follow the *Lochia*, it is dangerous. And he adds in the following Aphorism; *Menstruis abundantibus Morbi eveniunt, & subsistentibus accidunt ab utero Morbi*: "If "the Courses or *Lochia* flow too much, Diseases follow; and if they stop, Diseases happen from the "Womb."

Diseases proceeding from too great abundance of the *Lochia*, are, as we have seen in the first of these Aphorisms, Convulsions, and *Syncopes*, or Faintings: and if they do not kill the Woman, they weaken her very much; she grows lean, she remains a long time pale, her Legs and Thighs swell, and afterwards she becomes Hydropick.

As to the Distempers which follow the suppression of the *Lochia*, we will mention them in the next Chapter.

CHAP. X.

Of the Suppression of the Lochia, *and the Accidents which follow thereupon.*

THERE is so great a Flux of Humours from all Parts to the Womb, when a Woman is with Child, and during the Commotion in her Labour, that

that in case there be not afterwards sufficient Evacuation of them, the Woman is in great danger of very ill Accidents, and sometimes of Death it self; because these Humours, corrupting by their stay there, will certainly cause a great Inflammation: and this is the reason why the Suppression of the *Lochia* is one of the worst and most dangerous Symptoms which can befal a Woman after Delivery, especially if they happen to be totally and suddenly stop'd the first three or four Days, which is the time when they should come down plentifully: for then follows an acute Fever, great Pains in the Head, Pains in the Breast, Reins and Loins, Suffocation of the Mother, and an Inflammation which is suddenly communicated all over the lower Belly, which becomes very much swell'd and blown up; there happens also a great Difficulty of Breathing, Choakings, Palpitations of the Heart, Syncopes and Faintings, Convulsions, and often Death, if the Suppression continue: or if the Woman escapes it, she is in danger of an Abcess in the Womb, yea and afterwards a Cancer: or there may happen great Impostumes in the lower Belly, which is usual because of the nearness of the Place; as also Gouts, Sciatica's and Lameness, or Inflammation or Abcess in the Breasts, if the Humours be carry'd towards those Parts.

The Causes of the stoppage of the *Lochia*, proceed either from a great Looseness, because a great Evacuation that way turns the *Lochia* and makes them stop; or any strong Passions of the Mind, as great Fear, or Grief, or any Anger, or Swoonings, for these things do cause the Humours to retire suddenly inwards, and by this quick Motion they often cause Suffocations. Great Cold stops the *Lochia*, because it closes the Vessels and Pores of the Womb: the use of astringent Remedies produces the same effect, as also cold Drink; because by condensing and thick-

thickning the Humours, they hinder their easy flowing: strong and frequent Agitations of the Body, by rarifying and dispersing them throughout every Part, do likewise not permit them to be evacuated by the Womb.

To bring the *Lochia* well down, let the Woman avoid all Perturbations of Spirit which may stop them; let her lie in Bed with her Head and Breast a little rais'd, keeping her self very quiet, that so the Humours may be the easier carry'd downwards by their natural tendency; let her observe a good Diet, somewhat hot and moist; let her rather use boil'd Meats than roast: and if she be any thing feverish, let her use Broths only with a little Jelly; let her avoid all binding things: let her *Ptysan* be made with Aperitives, such as are the Roots of *Succory*, *Dogs-Grass*, and *Asparagus*, with a little *Aniseed* and *Hops*; and every other time let her take a little Syrup of *Maiden-Hair* in a Glass of this *Ptysan*; and above all, let her carefully shun cold Drink: Clysters may likewise be given her to draw the Humours downwards; and her lower Parts may be fomented with an emollient and aperitive Decoction made with *Mallows*, *Marsh-Mallows*, *Pellitory* of the Wall, *Camomile*, *Melilot*, the Roots of *Asparagus* and *Linseed*; with which Decoction the Womb may likewise be injected! and with the Herbs, being well boil'd and strain'd thro' a very coarse Cloth, let a Cataplasm be made with the addition of Oil of *Lillies*, or *Hogs-Greese*, and apply'd very hot to the lower Belly: together with these let her Thighs and Legs be strongly rub'd downwards, bathing them very hot with the same emollient Decoction; there may be likewise apply'd large Cupping-Glasses to the uppermost part of the inside of her Thighs. It would not be much amiss to use an Aromatick Perfume, if it were not that it caus'd a heaviness of the Head, as *Hippocrates* notes in the 28th Aphorism of the 5th Book, where he

he saith; *Suffitus Aromatum muliebria educit: sæpius vero & ad alia utilis esset, nisi Capitis induceret gravitatem.*

Now whilst all these things are put in practice, bleeding in the Foot or Arm must not be forgot, according as the Accidents caus'd by this Suppression of the *Lochia* require: neither must we blindly follow the Opinion of many Women, who believe that bleeding in the Arm in this Case is very pernicious.

This Imagination is so firmly rooted in the Heads of almost all of them, that if in case a Childbed Woman happens to die after bleeding in the Arm, they fail not absolutely to condemn that as the Cause. But this their Opinion is not according to knowledge; for sometimes bleeding in the Arm is better than in the Foot, and at other times that in the Foot is more certain than bleeding in the Arm: As for example, suppose a Woman be very full of Humours throughout the whole Habit of her Body, and her *Lochia* be suppress't, by reason of which there happens an Inflammation in her Womb, and besides a great Fever and difficulty of Breathing, as it ordinarily arrives in these Cases.

'Tis most certain, that if she were immediately blooded in the Foot, being very Plethorick, as we have suppos'd, there would be so great abundance of Humours drawn down into the Womb, that the Inflammation would be thereby much augmented, and consequently all the Accidents of the Distemper; but 'twould be much better in this Case rather to alter the Habit, first by bleeding in the Arm, and afterwards the most pressing Accident being partly diminish'd, it will be very much to the purpose to bleed in the Foot: for by this means Nature (which was almost overcome under the Burden of these redundant Humours) being eas'd of some part of them, doth the more easily command and govern the rest; but on the other side, if there be a Stoppage with-

without the appearance of a great plenitude in the Body, and without any notable Accident, bleeding in the Foot, if it be desir'd, may be then presently put in practice. However, I think it most convenient that it should always * be preceded with bleeding in one of the Arms.

* *Not necessary, except for Reasons above-mention'd.*

CHAP. XI.

Of the Inflammation which happens to the Womb after Delivery.

VERY often the stopping of the *Lochia* (of which we have lately discours'd, and especially at the beginning of Childbed) doth cause an Inflammation to the Womb, which is a very dangerous Disease, and the Death of most of the Women to whom it happens.

It is also very often caus'd from some Hurt or Bruise of the Womb by any Blow or Fall, and especially from being too rudely handled in a bad and violent Labour, or by the falling out of the Womb after Labour; or else because of some false Conception, or other strange Body remaining behind in it, which corrupts there; and likewise because it might have been too much compress'd in the beginning of the Labour, by the great Swaths and Napkins wherewith the Midwives and Nursekeepers usually swathe the Belly of a new-laid Woman, to keep it (as they say) in its place: which happens also very often when the Blood being stir'd and overheated by the Agitation of a rude Travail, is carry'd thither in too great abundance, and there stays without Evacuation.

An Inflammation of the Womb may be known by being much more swell'd after Labour than is requisite, and

and when the Woman feels a very great Heavineſs in the bottom of her Belly, and that it is ſwell'd and blown up almoſt as big as before Delivery; if ſhe have a difficulty in making Water, and going to Stool; or that ſhe perceives her Pain augment when ſhe is voiding her Excrements, becauſe the Womb preſſes the right Gut upon which it is placed, and to which by its Proximity it communicates the Inflammation, as well as to the Bladder; ſhe hath then alſo, beſides a great Fever with a very great difficulty of Breathing, a Hiccough, Vomiting, Convulſions, and in the end Death, if the Diſeaſe be not ſoon cur'd. A Woman that hath receiv'd a Bruiſe, or any violent Compreſſion of the Womb, is in great danger, that after the Inflammation, if ſhe do not die of it, an Abceſs will be there made, or that there will remain ſome *ſchirrous* Tumour, and it may be an incurable Cancer, which will make her lead a miſerable and languiſhing Life the reſt of her Days.

Wherefore as ſoon as an Inflammation is perceiv'd, the Cure of it muſt be endeavour'd, by tempering the heat of the Humours, and turning and emptying the Superfluities of them as ſoon as may be; firſt extracting or procuring the Expulſion of ſuch ſtrange things as may remain in the Womb after Labour, according to the Directions given in its proper Place; and above all, treating her at this time with very great Tenderneſs, uſing not the leaſt Violence, for fear the Evil may be thereby augmented.

The Humours may be temper'd by a cooling Diet, uſing Food that nouriſhes little: wherefore let her be contented with only Broth for her Nouriſhment, made of Veal or Pullet, but not too ſtrong of the Fleſh, together with cooling Herbs, ſuch as Lettice, Purſlane, Succory, Borrage, Sorrel, and the like; let her abſtain from Wine, and drink *Ptyſan*, made of the Roots of Succory and Dogs-graſs, Barley and Liquoriſh; let her keep her ſelf very quiet in her Bed;

Bed; let her not be ſwath'd too ſtrait, and let her Body be kept open with ſimple *Anodyne* Clyſters; becauſe if there be any Acrimony in the Humours, they will cauſe Throws, which extremely pain the inflam'd Womb; and amongſt all the Paſſions of her Mind, let her eſpecially avoid Anger.

The redundancy of Humours may be evacuated and diverted by bleeding; which at firſt muſt be in the Arm, and not in the Foot, for the Reaſons given in the foregoing Chapter; reiterating it without loſs of much time, for the Accident is very preſſing, until that the greateſt part of the Plenitude be a little evacuated, and the Inflammation ſomething diminiſh'd: and then bleeding in the Foot will not be amiſs, if the Caſe require it.

It may be convenient to anoint the Belly with *Unguentum refrigerans Galeni*, or Oil of Roſes, or Oil of ſweet Almonds mixt with a little Vinegar. Injections may likewiſe be given into the Womb, provided they be not reſtringent, leſt making a greater ſtoppage of the *Lochia*, which always flow a little in this caſe, the Diſtemper be augmented; for which reaſon let temperate Medicines be only us'd, without any manner of Aſtriction, as Barley-water, with Oil of Violets, or luke-warm Milk.

Sometimes an Inflammation of the Womb converts into an Impoſthume, which yields great quantity of Matter; there is then much danger of Corruption in that part, as well by reaſon of its Heat and Moiſture, which are the Principles of it, as becauſe no proper Remedies can be applied, or eaſily kept to it. Since therefore nothing elſe can be done, we muſt be contented with an univerſal *Regimen* and *Deterſive* Injections to carry off the matter, that ſo the Corruption be not augmented by its long ſtay there; which may be effected by a Decoction of Barley and Agrimony mixt with Oil of Roſes and Syrup of Wormwood, and heighten'd with ſome Spirit of Wine, if there

there be a great Putrefaction. But if the Impoſthume turns to an ulcerous Cancer, then, notwithſtanding the uſe of any Remedies whatſoever, this miſchievous Diſeaſe will endure till Death; wherefore we muſt be contented with palliative Medicines, and a good Diet: and in this follow the Precept of *Hippocrates*, in the 38th Aphoriſm of his 8th Book; *Quibus occulti Cancri fiunt, non curare melius; curati enim citius intereunt, non curati vero longius vitam trahunt.* "It is better, ſays he, not to take an occult and hid-"den Cancer in hand, for it haſtens the Death of "the Patient, and they who let it alone live long-"eſt. Now he means by an occult Cancer, that which breeds within the Body, and eſpecially that in the Womb.

CHAP. XII.

Of the Inflammation of the Breaſts of a new-laid Woman.

UNTIL of late it was always believ'd, that the Blood was the matter whereof the Milk was made in the Breaſts; but it is much more probable, that the *Chyle* only, and not the Blood, is deſtin'd to its Generation, as well as it is the true matter out of which all the Blood of the Body is made. That which eaſily makes us judge ſo, is the new Diſcovery of the Channel of the *Thorax*, which conveys the *Chyle* into the *Subclavian* Vein, found out by Monſieur *Pecquet*, Phyſician of the Faculty of *Montpelier*, to whom all Poſterity will be eternally indebted, having hereby a full diſcovery of ſeveral notable Errors, which (for want of ſo fair and neceſſary a Knowledge) was ſlid and entertain'd into the Practice of Phyſick until this time.

* *They are the Lympheducts.*

time. However, since the * Vessels, which may for this purpose convey part of this *Chyle* to the Breasts, are not yet manifestly known, we will content our selves to explain after the following manner the cause of the Inflammation of the Breasts, which doth very often happen to Women newly deliver'd.

All the Blood and Humours are so heated and agitated during Travail, by the Pains and Throws of Labour, that the Breasts compos'd of glandulous and spongeous Bodies, easily receiving in too great abundance of these Humours, which flow to them from all parts, are soon inflam'd thereby; because this Repletion doth very sensibly and painfully distend them: to this contributes very much the Suppression of the *Lochia*, and an universal fulness of the Body. This Inflammation may likewise happen by the Woman's having been too strait lac'd; by some Blow received upon the Breasts; or for having lain upon them, which easily bruises them, as also for want of having given Milk to the Child; in as much as by this means the Milk which is in great quantity in the Breasts, not being evacuated, is over-heated, and corrupts by too long stay there. But from whatsoever cause this Inflammation of the Breasts of a Woman new-laid may proceed, convenient Remedies must be speedily applied, lest it afterwards aposthumates; or else, that not suppurating, there remains a *Schirrous* Hardness, which in time may degenerate into a Cancer, a very pernicious Malady, and for the most part incurable when confirm'd. Besides the danger that an Inflammation of the Breasts may be converted into these dangerous Distempers, there happens usually to the Woman in those Parts, which are very sensible, an extreme Pain, which often causeth shaking Fits, and afterwards a Fever, with so great a burning of the whole Body, that she can scarce endure any Clothes upon her; and when she doth ever so

little

little uncover her self, or put her Arms out of the Bed, she hath new shaking Fits, which afterwards augment the Heat of her Fever: it is no great wonder, that a Fever soon happens upon this Occasion, because the Breasts by their nearness to the Heart do easily communicate their Inflammation, which sometimes excite Fury and Phrenzy, if the Blood be suddenly and in great abundance carry'd thither; as *Hippocrates* assures us in the 40th Aphorism of his 5th Book; *Quibuscunq; Mulieribus ad Mammas sanguis colligitur, furorem significat.* "If, says he, the Blood "be carry'd to, and in great abundance collected in "the Breasts, it signifies that Fury and Phrenzy will "follow.

Now the principal and most certain means to hinder the afflux of so great a quantity of Humours to the Breasts, and prevent the coming of an Inflammation there, is to procure a good and ample Evacuation of the *Lochia* by the Womb. Wherefore if they are suppress't, they must be provok'd by the means elsewhere directed; for by this Evacuation all the Humours will take their course towards the lower Parts. The whole Habit of Body may be empty'd by bleeding in the Arm; afterwards for a greater Diversion, and the better to bring down the *Lochia*, bleed in the Foot: during which topical Remedies to the Breast must not be forgot, as in the beginning, to chafe well into them Oil of Roses and Vinegar beat together, laying upon them afterwards *Unguentum refrigerans Galeni*, and a third part of *Populion* mixt with it; or a Cataplasm made of the Settlings found in a Cutler's Grindstone-Trough, Oil of Roses and a little Vinegar mixt together. If the Pain continue very great, another Cataplasm may be made of the Crum of white Bread, and Milk mixt with Oil of Roses, and the Yolks of raw Eggs; upon all these may be laid Compresses dipt in Vinegar and Water, or in *Plantane*-Water; but great Care must

be taken, that theſe Remedies applied to the Breaſt be only cooling and repreſſing, without any great Aſtriction; for it may cauſe a *ſcbirrous* Tumor, which would remain a long time, and it may be a worſe Diſtemper.

After the height of the Inflammation ſhall be paſt, and the greateſt part of the antecedent Humours evacuated and diverted, let Medicines a little reſolving be us'd, to digeſt, reſolve and conſume the Milk which abounds in the Breaſts, to prevent Corruption by its ſtay. Wherefore let them be drawn by the Child, or ſome other Perſon, or elſe reſolv'd, unleſs that it be ſuppurated: It may be reſolv'd by the Application of pure Honey to the Breaſts, which in this caſe is very effectual; or elſe a red Cabbage-leaf may be anointed with it, and apply'd to the Breaſts, having firſt wither'd it a little before the Fire, and all the hard Stalks and Veins taken out. Do not lace the Breaſts too ſtrait, nor apply any coarſe or rough Clothes to them, leſt they be therewith ſcratch'd and bruis'd. A very good Remedy for the ſame is, a whole red Cabbage boil'd in River Water to a Pap, and then well bruis'd in a wooden or marble Mortar, and pulp'd thro' a Sieve; which mixt with Oil of Camomile, may be apply'd as a Pultiſs to the Breaſts.

In the uſe of all theſe means, let the Woman obſerve a cooling Diet, not very nouriſhing, that too much Blood and Humours may not be engender'd, of which there is already too great a quantity; ſhe muſt always keep her Body open, that the Humours may be ſo much the more carry'd downwards, and conſequently turn'd from the Breaſts. During the whole time the Inflammation continues, let her keep her Bed, lying on her Back, that ſhe may have the more eaſe; for being rais'd, the Breaſts which are groſs and heavy, becauſe of the abundance of Humours with which they are repleted, do very much pain

pain her when they hang down. Let her ſtir her Arms as little as may be; and after the * 14th or 15th Day of her Child-bed, when ſhe hath ſufficiently cleans'd, and the Inflammation is abated, and ſhe no longer feveriſh, purge her once or twice, as the caſe ſhall require, to empty the ill Humours which remain in the whole Habit of her Body. If, notwithſtanding all theſe Remedies, the ſwelling of the Breaſt doth not go down, and that ſhe ſtill feels much Pain, and a great Pulſation, with a hardneſs more in one place than another, it is certain it will apoſthumate there, of which we will treat hereafter.

* *Too ſoon unleſs upon urgent occaſion.*

CHAP. XIII.

Of the Curdling and Clodding of the Milk.

IN the beginning of Child-bed the Woman's Milk is not well purify'd, becauſe of the great Commotion her Body ſuffer'd during Labour, and it is then mixt with many other Humours: Now if they are then convey'd to the Breaſts in too great abundance, they cauſe an Inflammation, treated of in the foregoing Chapter; but when the Infant hath already ſuck'd fifteen or twenty Days, or more, the Milk then only without this Mixture of Humours is contain'd there, and ſometimes curdles and clods. And then the Breaſts, which before were ſoft and even, become hard, uneven and rugged, without any redneſs; and the Diſtinction and Separation of all the Kernels fill'd with curdl'd Milk, may eaſily be perceiv'd. The Woman finds a great Pain there, and cannot milk them as before; ſhe finds a ſhivering, eſpecially about the middle of her Back, which ſeems to her like Ice. This ſhivering is uſually follow'd by

a Fever of four and twenty Hours continuance; and ſometimes leſs, if the clodding of the Milk do not turn to an Inflammation of the Breaſts, which will undoubtedly happen, if it be not empty'd, or diſſipated and reſolv'd.

This clodding of the Milk, for the moſt part proceeds, becauſe the Breaſts are not fully drawn; either for that ſhe hath too much Milk, or the Infant is too ſmall and weak to ſuck all, or becauſe ſhe doth not deſire to be a Nurſe; for the Milk in theſe Caſes remaining in the Breaſts, after Concoction, without being drawn, loſeth the Sweetneſs and Benignity it had, and by means of the Heat that it there requires, and the too long ſtay it there makes, ſouring, it curdles and clods; juſt as we ſee Runnet put into ordinary Milk, turneth it into Curds. This Accident may likewiſe happen from having taken a great Cold, or keeping the Breaſts not well cover'd.

From whatſoever Cauſe this Curdling proceeds, the readieſt and moſt certain Remedy is, ſpeedily to draw the Breaſts, until they are emptied and dried; but becauſe the Infant being weak and ſmall, cannot draw ſtrong enough, by reaſon the Woman is not ſoft milcht, when the Milk is ſo curdled, let another Woman draw them, until the Milk comes freely, and then ſhe may give the Child ſuck: and to the end ſhe may not afterwards breed more Milk than the Child can draw, let her uſe Diet that gives but little Nouriſhment, and keep her Body always open. But when it happens that the Woman neither can nor will be a Nurſe, 'tis neceſſary to uſe other means for the curing of this Diſtemper: Then her Breaſts muſt not be drawn: for attracting more Humours, the Diſeaſe will ever recur if they be not again emptied. Wherefore 'tis neceſſary to prevent the coming of any more Milk into them, and to reſolve and diſſipate that which is there: for this purpoſe the Plenitude of the Body muſt be emptied by bleeding in the Arm;

Arm; and beſides this Evacuation, let the Humours be drawn down by ſtrong Clyſters, and bleeding in the Foot, purging alſo if it be neceſſary. And to reſolve, digeſt and diſſipate the curdled Milk, apply the *Cataplaſm*, which we ſaid was proper, as that of pure Honey; or that of the four Brans boil'd in a Decoction of Sage, Milk, Smallage and Fennel, mixing with it Oil of Camomile, with which Oil the Breaſts may likewiſe be well anointed.

I have ſometimes ſeen Women apply to their Breaſts, with no ſmall Succeſs, the Linnen-covers of Salt-butter-pots; it is a drying Remedy, and fit to ſoak up the moiſture of theſe Parts, and may be us'd, provided the Remedies before mention'd have diſcuſs'd the Milk: but if notwithſtanding all this it cannot be diſſipated nor reſolv'd, there is great danger, by its long ſtay there, that it will cauſe an Inflammation of the Breaſt.

If it ſo happen, it may be remedied according to the Directions of the foregoing Chapter. Let us now treat of Apoſthumes in the Breaſts, which often follow their Inflammation.

CHAP. XIV.

Of Apoſthumes in the Breaſts of a Woman new-laid.

THERE may at all times happen to Maids as well as Wives Apoſthumes in the Breaſts, either hot or cold, the Cure of which doth not differ, as *Guido* ſaith; except that too ſtrong Repercuſſives muſt not be us'd, becauſe of their nearneſs to the Heart, and that the retention of the Courſes contributes much to the breeding of them, and their Provocation to their Cure, as alſo bleeding in the *Saphæna*:

but our Intention is only to treat of thoſe which happen to a new-laid Woman, and ordinarily ſucceeds an Inflammation of the Breaſts, caus'd by the Corruption of the Milk, and too great abundance of Blood and Humours convey'd thither.

After all poſſible Endeavours have been us'd to cauſe this Inflammation to ceaſe, whether by univerſal Evacuation of the Body, as well by bleeding in the Arms and Foot, as the Provocation of the *Lochia*, or alſo by Medicines reſtraining, repelling, or ſimply diſſolving, apply'd to the Breaſts; if the Woman ſtill ſuffers great Pain there, and hath a ſtrong Pulſation more in one place than another, where a hardneſs of a livid colour may alſo be perceiv'd, and ſoft in the middle, 'tis a ſign that they will apoſthumate. Then the Application of all the former Topicks muſt be forborn, and ripening Medicines apply'd; it being much better to make a perfect Suppuration, than longer to uſe Repellers or Reſolvers, leſt the matter be more confirm'd in driving back, and only reſolving the more ſubtil Parts, leaving the thicker behind in the Breaſts, which will become *ſchirrous*, and be very difficult to diſſipate, or by its long continuance, as it often happens, may turn to a Cancer.

To ſuppurate the Apoſthume, put an emollient and ripening Pultiſs upon the Breaſts, ſuch as that made of Mallows, and Marſh-mallows, with their Roots, Lilly-roots, and Linſeed bruis'd, boil'd to a Pap, that it may be pulp'd thro' a Sieve, and ſo no hardneſs may be left to hurt the Breaſts, which are then in great Pain. Afterwards mix a good quantity of Hogs-greaſe, or *Baſilicon* with it, and lay a little Cloth thick ſpread with the ſame *Baſilicon*, upon the place where it is likely ſooneſt to break, and the Pultiſs all over it; renewing it twelve hours after, or at furtheſt next day; continuing this Remedy till the Apoſthume be fully ripe. It is much better to uſe this Cataplaſm, or the like, than Plaiſters; for a Pultiſs cloſeth better by

by its Softneſs, and is more equally apply'd to the Breaſt; it mollifies it alſo, and keeps it much more ſupple: beſides it is eaſier chang'd and cleans'd than Plaiſters, which by their ſticking do very much incommode theſe Parts.

As ſoon as the Apoſthume is ripe, it muſt be open'd, if it open not of it ſelf. The time when it is fit, may be known, by the ceaſing of the Beating the Woman felt before in her Breaſts, and that the Pain and Fever is much diminiſh'd; and then beſides, the middle of the Apoſthume is a little elevated to a point, and very ſoft, and the contain'd matter may by the Finger be perceiv'd to fluctuate.

When theſe Signs ſhall appear, the Apoſthume muſt be open'd in the fitteſt place to give Iſſue to this matter; being careful not to do it too ſoon, and before the matter is fully ripe, becauſe of too much Pain: for the Breaſts are very ſenſible Parts, and eaſily receive a Defluction, becauſe of their thin and ſpongeous Subſtance, interlac'd with an infinite number of Veſſels. Wherefore it muſt be permitted to ripen, yet not ſuffer'd to ſtagnate there too long. This Apertion may be made with a Lancet, or with a grain of potential Cautery, making it large enough to evacuate ſuch Clods as are there uſually met with: but it is beſt to uſe the Lancet, becauſe there is no loſs of Subſtance, and the Scar is not ſo disfiguring as that which ſucceeds the Application of a Cautery.

Guido would have this Inciſion made in the Form of an Half-moon, to follow the round Figure of the Breaſt; but it is no matter of what Faſhion it is, provided it be in a place convenient for the emptying the matter, and that care be taken that ſome great Veſſels be not open'd, the principal of which are towards the Arm-pits. After that all the Matter and putrifi'd clodded Milk, there found, be empty'd, the Apoſthume, after the uſual manner, muſt be cleans'd and

mundified, observing not to make the Tents too long nor too hard, but only very soft Pledgits of Lint, without thrusting them too deep, in fastning a Thred to the first, if there be occasion, the better to draw it out, because these Apostbumes ordinarily are hollow. If there be much Pain, dip the Boulsters in Oil of Eggs, or *Basilicon* mixt with a Digestive, if there remains any thing yet to suppurate; afterwards use Detersives and Mundifiers, as Honey of Roses, or *Unguentum Apostolorum*, according as the Case requires, laying upon it a good Plaister *de Mucilaginibus*, to soften that Hardness which may yet remain.

Sometimes the Breasts do not apostbumate only in one place, but often each of their principal Kernels comes to Suppuration, and makes so many Apostbumes, so that they break sometimes in five or six places, all yielding Matter. In this Case you need not lay open every of these small Holes, but it will be sufficient to make one or two in the most depending part; for all the Matter (which hath an easy Communication within, from one Part to another, because the Breasts are spongeous) will soon be empty'd, and the making of one or two large Orifices in a commodious place, will quickly dry up all the rest. But the certainest Remedy to cure an Apostbume of the Breasts after the Matter is emptied, and to prevent the Orifices from being too long time fistulous, is quite to drive back the Milk, according as we have taught in its place, not only of the apostbumated Breast, but of both; tho' both be not effected, because there always remains Communication: by this means the Ulcers will be much sooner and easier dry'd up, and for this cause the Woman's Body must be kept open by Clysters, if she goeth not to Stool naturally; and she must be now and then purg'd, to evacuate the Humours, and drive them downwards, using also a slender Diet.

CHAP.

CHAP. XV.

Of Excoriation, and Loss of the Nipples.

VERY often Women that are Nurses, and especially the first time, are subject to have their Nipples, which are indu'd with an exquisite Sense (because many small nervous Filaments do there terminate) chop'd and excoriated: which is very painful to them, and insupportable, when notwithstanding this Indisposition they give suck to their Children, and so much the more, by how much they are hard milch'd, as it happens the first time, the Milk not yet having made way thro' the small Holes of the Nipples, which are not yet thorowly open'd; and then the Child takes more pains to suck, than when the Breasts do almost run of themselves. And sometimes these Chops and Excoriations do so increase by the Child's continual sucking, that in the end it takes the Nipple quite off from the Breasts, and the Woman is no longer capable of giving suck, and there remains sometimes an Ulcer very hard to be cur'd.

This may sometimes happen from Childrens being so dry and hungry, that they have not patience to suck softly: and finding the Milk not speedily to follow, as they desire, they do bite and mump the Nipples so strongly (thinking to draw Milk down the better) whether they have Teeth or no, that they become raw: and in fine, still continuing it, they are quite taken away, as we have said. It happens also that other Infants have their Mouths so hot, that they make the Nipples sore, as when the Children have those little Ulcers, call'd * *Apthæ*; and much sooner if they have the Pox, with which also they may infect the Nurses: and then those Ulcers, so caus'd, do not easily yield

* *Thrush.*

to

to ordinary Remedies; but on the contrary, grow daily worse and worse.

These Chops and Excoriations must not be neglected, as well by reason of the great Pain they put the Woman to when she gives suck, as to avoid their daily growing worse and worse; and at length their turning to malignant Ulcers. Wherefore as soon as they begin, let the Woman forbear giving her Child suck, until they are quite cur'd; for with continual sucking it will be very difficult to hinder its return by irritating of them, during which the Milk must, for a small time, be kept back; lest by being no longer drawn, it cause an Inflammation in the Breast thro' its great abundance. However, if but one Nipple be sore, she may give suck with the other. To the sore Nipples desiccative Medicines may be apply'd, as Allum, or Lime-water; or they may be only bath'd with Plantane-water, putting upon them small soft Rags, dip'd in any of them: or use a small Ceruse Plaister, or some Ointment, as *Dia Pompholygos*, or a little Powder of *Amylon*; but especially Care must be taken, that nothing be apply'd to disgust the Child, and therefore many content themselves to use only Honey of Roses.

Some will instead of Desiccatives use Emollients, but there must be a distinction: for Emollients are fit to preserve from such Fissures; but when they are already made, Desiccatives are best: and to prevent the Woman from hurts in these Parts, which are very painful, and that the Rags may not stick to them, one ought to put upon them a little Wax, or Wooden Caps, or Leaden ones, they being more desiccative, like to those represented in the beginning of the Chapter, which must have several small Holes on the top of them, as well to give Issue to the *Sanies*, which proceeds from the small Ulcers, as that the Milk, which often distils out of the Nipples, may by this means pass away.

If

If the Child hath wholly ſuck'd off the Nipples, the Milk muſt then be quite dry'd away, that ſo the Ulcers which remain may be the ſooner heal'd; for elſe one ſhall hardly obtain the end, and in time they may become callous and malignant: and if the Child hath the Pox, it will be very difficult to heal thoſe Ulcers of the Nurſes Nipples, if it continues ſucking. Wherefore the Child muſt be put to another, who muſt uſe Preſervatives againſt this Malady; but if they be only ſmall ſimple Ulcers in the Mouth, without any Malignity, 'tis enough to waſh them with Barley-water, mix'd with a little Juice of Citrons: and the better to temper theſe Humours which are over-heated, let the Nurſe take a cooling Diet, that her Milk may become of the ſame Temperament: and let her be blooded and purg'd, if it be neceſſary.

When the Nipples are quite loſt, it is very difficult to give a Child longer ſuck; becauſe it can take no hold to ſuck the Milk, and alſo the ſmall Holes of the Nipples are clos'd up by the Ulcers. But if notwithſtanding ſhe ſhall deſire to give ſuck, another Woman muſt by degrees make her new Nipples, after the Ulcer ſhall be perfectly heal'd, whoſe ſucking with her Mouth will draw them out, and by this means unſtop the Root of the old Nipples; or uſing a fit Inſtrument of Glaſs, ſuch as is figur'd at the beginning of this Chapter, with which the Woman her ſelf may alſo ſuck them five or ſix times a day: and to ſhape them, and ſo preſerve them, being thus drawn out, from ſinking into the Breaſts again, let her put upon them a ſmall Cap of Wood, or other matter, ſuch as is above-mention'd; and doing ſo by degrees, after the Nipples are quite form'd and unſtop'd, ſhe may again give her Child ſuck.

What we have hitherto writ in this third Book, ſhall ſuffice for Directions concerning a new-laid Woman, and alſo for the Knowledge and Cure of Diſtempers

ſtempers which uſually happen to them, upon which we need not further enlarge; for if any other happen than what we have mention'd, and which do not properly belong to the care of a Chirurgeon, a Phyſician muſt be ſent for, to remedy them by his Prudence, and according as Art requires. Let us now treat of Infants new-born, and run thro' the Diſeaſes they are moſt ſubject to.

CHAP. XVI.

Of tending Children new-born, and firſt how to bind, cut, and ſwathe the Navel-ſtring.

IF the Infant (as we have ſaid before, diſcourſing of Deliveries) hath often need whilſt he is in his Mother's Belly, of the good Conduct and Dexterity of a Chirurgeon, or Midwife, to deliver him and bring him happily forth out of that Dungeon, wherein he hath been a long time inclos'd, their Aſſiſtance is nothing leſs neceſſary to him as ſoon as he is born, as well to remedy ſuch Indiſpoſitions which ſometimes he brings into the World, as to defend him from many Infirmities, to which the Weakneſs of his Age and Tenderneſs of his Body renders him ſubject. We have, in the whole foregoing Book, very particularly ſhown how to help him in his coming into the World; there remain now only Directions what is to be done afterwards: to this purpoſe we will firſt ſhew how to tie, cut, and bind up the Navel-ſtring.

There are ſome Perſons who, as ſoon as the Infant is come into the World, do bind and cut the Navel-ſtring, before the Burden be come away: but it is better, if poſſible without too long ſtay, to defer it until the Secondine be likewiſe drawn forth; for the Womb,

Womb, which is extremely wide and open after the coming forth of the Child, would be in danger of taking cold by the outward Air, during the delay made for the Ligature of the Umbilical Veſſel; beſides that the Orifice cloſing a little, it would afterwards be more difficult to bring the After-birth away.

To make this Ligature as it behoveth, let the Midwife do as followeth: As ſoon then as all is come away from the Woman, ſhe muſt immediately cloſe up the Womb with Clouts, according to Directions already given, and then carry away the Child and Burden to the Fire; having put it into a warm Bed and Blanket, let her take a brown Thread four or five double, of a quarter of an Ell long or thereabouts, ty'd with a ſingle Knot at each of the Ends, to prevent their entangling: and with this Thread ſo accommodated (which the Midwife muſt have in a readineſs before Labour, as alſo a good pair of Sciſſers, that ſo no time may be loſt) let her tie the String within an Inch of the Belly, with a double Knot; and turning about the ends of the Thread, let her tie two more on the other ſide of the String, reiterating it again, if it be neceſſary, for greater Surety. Then let her cut off the Navel-ſtring another Inch below the Ligature, towards the After-birth, ſo that there only remain but two Inches of the String; in the midſt of which will be the Knot we ſpeak of, which muſt be ſo ſtrait knit, as not to ſuffer a Drop of Blood to ſqueeze out of the Veſſels, but not ſo ſtrait as to cut it in two.

For which reaſon the Thread muſt be pretty thick, and pretty ſtrait knit, it being better too ſtrait than too looſe: for ſome Children have miſerably loſt their Lives with all their Blood before it was diſcover'd, becauſe the Navel-ſtring was not well tied. Now that ſo great a Miſchief may not happen, great care muſt be taken after it is cut, that no Blood

ſqueeze

squeeze thro': for if there do, new Knots must be made with the rest of the String (which for this reason must be left a little long) to close it more exactly. This being done, wrap up the end of the String thus cut and ty'd three or four times about with a small Rag, dry, or dipt in Oil of Roses, if you please; then having put another small Rag three or four double upon the Belly of the Child above the Navel, lay the String so wrap'd up upon it, that it may not touch the naked Belly: on the top of all put another small Boulster, and then swathe it with a linen Swath four Fingers broad, to keep it steddy, lest by rolling too much, or by being continually stir'd from side to side, by the motion of the Belly, it comes to fall off, before the Vessels be quite clos'd up and heal'd.

'Tis very convenient, as we have said, to lay the remaining part of the String on the upper part of the Belly, that so, if by chance the Vessels be not sufficiently clos'd, the Blood may not so soon slide away, as if it were turn'd downwards; for we find sometimes this String to be so great in some Children, that altho' it were very close ty'd at first, yet coming afterwards to wither and dry, the Ligature is rendred looser, by means of which 'twill afterwards easily bleed, if care be not taken. This Accident hapned lately to a poor Child, who dy'd the twelfth day by such a Flux of Blood, altho' the Midwife protested to me, that she had ty'd the String very exactly; and being astonish'd how that could happen, she told me, that it must assuredly be (which indeed was the truth) because the Knot was loosen'd in proportion to the withering of the String: wherefore to avoid such a Misfortune, let a new Knot be knit the first time the Child is open'd.

The String thus ty'd, begins daily to dry away, and is separated from the Belly at the end of the sixth or seventh day ordinarily, and sometimes sooner,

ner, but rarely longer than the eighth or ninth. It must always fall off of it self without any provocation, lest that being separated too soon, and before the Vessels are entirely clos'd and heal'd up, a Flux of Blood follow, which is very dangerous, as we have said, or lest it cause an Ulcer very hard to be cur'd.

There are some good Gossips, who are a little superstitious in the tying of this String longer or shorter, according to the difference of the Sex, for some pleasant Reasons they give, but it is a mere Abuse; for at whatsoevet distance they tye the Knot, either nearer or further, tho' half a foot from the Belly, yet it will always be separated in the very same Place, just close to the Belly, because it is a part which remains wholly * inanimate, after the Child is come into the World. Wherefore, whether Boys or Girls, let the Knot be made at least an Inch from the Belly, as we have already directed; and not nearer, lest it pain or inflame the Child's Navel.

* *Without Life.*

It will not be from the Purpose to mention here a Business of great Consequence, which is sometimes capable to kill the new-born Babe, without almost knowing the Cause of it: 'tis a very bad Custom some Midwives have, before they make the Knot, they drive all the Blood out of the String into the Infant's Belly, believing that by this means they fetch it to it self, and strengthen it when it is weak: but 'tis no such matter, for as soon as these Vessels are ever so little cool'd, the Blood it contains quickly loses its Spirits, and is half coagulated in an instant; which is the Reason, that being driven back into the Infant's Liver, it is enough to cause very great Accidents; not because of its abundance, but because having quite lost its natural Heat, is is afterwards soon corrupted, and changeth and spoileth the Child's Blood, with which it comes to mix. They commonly

ly put this ill Cuſtom in practice when the Child is weak; but this doth ſooner ſuffocate it: for if they need Blood to give them Vigor, it muſt be good and laudable, and not that which is half clodded, and deſtitute of its natural Heat. Wherefore whether the Child be ſtrong or weak, if you will not put it in danger of its Life, or at leaſt cauſe him to have great Oppreſſions, Pains and Gripes, forbear driving his Blood thus out of the String into the Infant's Body. Now having thus ty'd and cut the String, waſh the Child preſently all over, and ſwaddle it afterwards, as we ſhall direct.

CHAP. XVII.

How a new born Babe muſt be waſh'd and cleans'd from the Excrements, as alſo how it ought to be wrap'd up in Swadling Clothes.

WHEN the Midwife hath order'd the Child's Navel-ſtring, juſt as we have directed in the foregoing Chapter, let her preſently cleanſe it from the Excrements it brings with it into the World; of which ſome are within the Body, as the Urine in the Bladder, and the *Meconium* found in the Guts, and others without, which are thick, whitiſh and viſcous, proceeding from the ſlimineſs of the Waters. There are Children ſometimes ſo cover'd all over with this, that one would ſay they were rub'd over with ſoft Cheeſe; and certain Women, of eaſy belief, do really imagine it was, becauſe they had often eaten ſome while they were with Child, that their Infants are thus full of this thick white Excrement, which in Colour and Conſiſtence is not unlike white Cheeſe.

Let

Let the Child then be cleans'd from all these Excrements with Wine and Water a little warm'd, and every part of his Body where this Excrement is; as principally the Head, because of the Hair, and the Folds of the Groins, and Armpits, and the Cods; which Parts must be gently cleans'd with a soft Rag, or a soft Spunge dipt in this lukewarm Wine. If this viscous Excrement stick close, that it will not easily be wash'd off from these Places, it may be fetcht off with Oil of sweet Almonds, or a little fresh Butter melted with the Wine, and afterwards well dry'd off. One must also cleanse and unstop with Tents of fine Rags, wet in this Liquor, the Ears and Nostrils; as for the Eyes, they may be wip'd with a soft dry Rag, not dipt in this Wine, that it may not pain them and make them smart.

After the Child is thus wash'd and cleans'd from these Impurities and Blood which come away in the Labour, with which sometimes its whole Body is besmear'd, all the Parts of it must be search'd to see if there be any Fault or Dislocation; whether the Nose be strait, or its Tongue ty'd; whether there be no Bruise or Tumor of the Head, or whether the Mold be not overshotten; or whether the *Scrotum*, in case it be a Male, be not blown up and swell'd: In short, whether it suffer'd any Violence in any part of its Body; and whether they be well and duly shap'd, that so Remedies may be us'd according to the nature of the Indisposition discover'd. But as it is not sufficient to cleanse the outside of the Child's Body, you must above all observe, that it must discharge the Excrements retain'd within: wherefore examine whether the Conduits of the Urine and Stool be open'd, for some have been born without having them perforated, and died for want of voiding their Excrements, because timely care was not taken of it. As to the Urine, all Children as well Males as Females, do render it as soon as they are

born, eſpecially when they feel the Heat of the Fire, and ſometimes alſo the *Mæconium* of the Guts, but nevertheleſs uſually a little after. If the Infant doth not render it the firſt day, that it may not remain too long in his Belly, and cauſe very painful Gripes, put up into his Fundament a ſmall Suppoſitory, to ſtir it up to be diſcharg'd; to this purpoſe a ſugar'd Almond may be us'd, anointed over with a little boil'd Honey, or elſe a ſmall piece of *Caſtile* Soap, rub'd over with freſh Butter: you may alſo give the Child to this purpoſe at the Mouth a little Syrup of Roſes, or Violets, mixt with ſome Oil of ſweet Almonds drawn without Fire, anointing the Belly alſo with the ſame Oil, or a little freſh Butter. It may be known when the Child hath voided all its *Mæconium*, if the Stools change from black and become pale, which is about the ſecond or third day; loſing by degrees this Tincture in proportion to the generation of new Excrements from the Milk, which about this time mixes with the firſt.

As to the *Mæconium*, which is an Excrement in Colour and Conſiſtence like to the Pulp of *Caſſia*, found in the Child's Guts when it comes into the World, 'twill be enough to the purpoſe to examine what it is, and from whence it proceeds. Wherefore, without dwelling upon the different Explications of Authors touching its generation, I will ingenuouſly give my Thoughts of it; which is, that it comes from the ſuperfluous Blood daily diſcharg'd, as it doth in all Perſons, and of all Ages, by means of the * *Hepatick* Channel; which coming from the hollow of the Liver, goeth and emptieth into the Inteſtine *Duodenum*, out of which is form'd the *Mæconium*; which afterwards ſerves to keep the Inteſtines of the *Fœtus* open and dilated, that ſo they

* *This* Hepatick *Channel our Author mentions, muſt be the* Ductus Communis, *which ſerves only to carry off the Bile which hath been ſeparated from it in the Liver, and convey'd to it by the* Cyſtick *and* Biliac *Channels, and*

they may the better perform their Office after its Birth. And to make it appear that it is truly thus made, and that the ſuperfluous Blood is continually diſcharg'd by the *Hepatick* Channel into the *Duodenum*, as I do ſay, there are ſome People of 80 Years of Age, who were never let Blood, nor never loſt any outwardly, who nevertheleſs do and have bred ſome † every Day, as muſt neceſſarily be confeſt. Now if they did not void it this way, they muſt ſoon be ſuffocated by its too great abundance. I know that many may anſwer me, that it is more credible that this diſcharge is made by the Branches of the *Vena Porta*, diſtributed throughout the *Meſentery*: but ſuch as are acquainted with the Circulation of the Blood, know, that naturally it cannot well be ſo; and I believe they would ſoon be of my Opinion, if they did but well conſider it. And it is not ſufficient to refute me, by objecting, that if the ſuperfluity of Blood be thus daily voided, one would always have bloody Stools; becauſe it is not unknown that this portion of ſuperfluous Blood, which is very ſmall in compariſon of the other Excrements proceeding from the Ailment with which it is mixt, doth eaſily there receive a change of Colour, by the alteration and kind of Concoction there made: whence it happens that it is not ſo eaſily perceiv'd in a Man as a Child, in whom the *Meconium* being yet without any mixture, retains more of the Colour; as alſo becauſe 'tis engender'd of * Blood only, which hath been ſeparated as uſeleſs to its Nouriſhment, and is after this manner expell'd. Now foraſmuch as there is but little ſuperfluous

and carries this Bile and no Blood to the Duodenum, *or* Jejunum. *There is no ſuperfluous Blood in the Liver; for what the* Vena Porta *brings, the* Vena Cava *carries away.*

† *Our Author runs on upon a falſe Suppoſition.*

* *To me it ſeems probable and rational, that the Ordure proceeds from that ſmall Subſtance we have formerly mention'd, which*

which is found in the Stomach and Duodenum *of the* Fœtus.

Blood in an Infant's Body, whilſt it is in the Womb, becauſe it conſumes a great deal of it for its Nouriſhment and Growth; beſides that it hath been purify'd by the Mother, before it is convey'd to him; ſo likewiſe there is but little *Mæconium* ingendred during the whole time of Pregnancy: for which reaſon alſo the Infant doth not void any during its ſtay in the Womb, but it doth when it is born, for then it receives Nouriſhment by the Mouth, of which plenty of other Excrements are made, which forceth him to caſt forth the firſt. And altho' the *Mæconium* hath continu'd in the Infant's Guts, during the whole time it was in the Mother's Belly, nevertheleſs, which is very admirable, it hath nothing near ſo ill a Scent as the new Excrements have, which are engendred out of the Nouriſhment taken in at the Mouth after it is born, altho' they make but a very ſmall ſtay there, and are daily diſcharg'd.

As ſoon then as the Midwife hath waſh'd and cleans'd the Child according to Directions, and that ſhe hath view'd every part of its Body, let her begin to ſwaddle it in its Swathing-Clothes, beginning firſt to cover the Head with a ſmall linen Biggen *, putting a woollen Cap upon it, having firſt put upon the Mold of the Head a fine linen Rag, three or four double, and four Fingers broad; which (that it may not ſtir) pin to the Biggen with a ſmall Pin on the outſide, that it may not prick the Child: this double Rag ſerves to defend the Child's Brain (which is not as yet cover'd over in this place with a Bone) as well from Cold, as other Injuries. Let her put ſmall Rags behind the Ears, to dry up the Filth which uſually is there ingendred: this done, let her put other Rags, as well upon the Breaſt, as in the Folds of the Armpits and Groins, and ſo ſwathe it, having wrap'd it up in Beds and warm Blankets.

* *This is the French Faſhion.*

It

It is not neceſſary to give a particular Direction how this ought to be done, becauſe it is ſo common, there is ſcarce a Woman but knows it: but we'll only ſay in general, that a Child muſt not be ſwath'd too ſtrait in his Blankets, eſpecially about the Breaſt and Stomach, that ſo he may breathe the freelier, and not be forc'd to vomit up the Milk he ſucks, becauſe the Stomach cannot be ſufficiently extended to contain it; and ſuch a Practice may poſſibly, in time, converting this Vomiting into an habit, prove a very great prejudice to the Child: Wherefore to avoid it, let his Arms and Legs be wrap'd in his Bed, and ſtretch'd ſtrait out, and ſwath'd to keep them ſo, *viz.* his Arms along his Sides, and his Legs equally both together, with a little of the Bed between them, that ſo they may not be gall'd by rubbing one another. After all this, the Head muſt be kept ſteddy and ſtrait, with a Stay faſtned on each ſide the Blanket; and then wrap the Child up in Mantles or Blankets, to keep it warm. He muſt be thus ſwadled, to give his little Body a ſtrait Figure, which is moſt decent and convenient for a Man, and to accuſtom him to keep upon the Feet; or elſe he would go upon all four, as moſt other Animals do.

Beſides all theſe Excrements mention'd, the Child hath yet a certain clammy Phlegm remaining in its Stomach, which he pukes up ſome few days after he is born. To remedy this, you muſt give the Child a ſmall ſpoonful of ſugar'd Wine, twice or thrice the firſt Day together, making him to ſwallow it: and by no means give it ſuck until it be moſt part evacuated, or digeſted and conſum'd by the Stomach, for fear leſt the Milk mixing with this viſcous Humour, ſhould corrupt, as it would do, if you gave it preſently ſuck. Some give them for this purpoſe a little Oil of ſweet Almonds, drawn without Fire, and a little Sugarcandy. The *Jews* are accuſtom'd to give their Children a little Butter and Honey, which

doth almost produce the same effect: and this they do, to follow what is said in *Isa.* 7. 14, 15. *Behold, a Virgin shall conceive and bear a Son, and shall call his Name* Emanuel; *Butter and Honey shall he eat, that he may know to refuse the Evil, and chuse the Good.* But Wine is much better, because it doth better cut and loosen this Phlegm, and helps to concoct and digest that which remains; and the Sugar sweetens its Acrimony, and helps to purge it away.

Now having given it this Medicine, lay it quietly to rest on his Side, that the Excrements may be the better evacuated and cast forth at the Mouth: for if the Child lies on the Back, it would be in danger, that remaining in its Mouth, a part of it would fall upon his * Breast, which might choke him, or at least very much offend him. Let us now see how he must be fed and order'd hereafter.

* *Rather fall with too great a Conflux into the* Oesaphagus, *or Gullet.*

CHAP. XVIII.

Of Dieting, and Ordering a new-born Babe.

A Child, which during its stay in the Mother's Belly, had no other Nourishment but the † Blood it receives by the *Umbilical* Vessels, hath for want of that, after its Birth, need to take some by the Mouth, and suck Breast-Milk: However it is not good to give it suck as soon as it is born, to prevent that so sudden a change, as well in respect of the difference of Nourishment, as the manner of receiving it, lest it cause some alteration in its Health. First therefore, empty the Phlegm out of his Stomach, giving him, as we have said, the first three or four Days, some Wine and Sugar, to cut and loosen it,

† *To this I have spoken before.*

ſt, to prevent the Milk he ſhall take from corrupting, being mixt with this viſcous Phlegm: wherefore it is beſt to ſtay until the * next day before you give it ſuck, that ſo it may be wholly evacuated, or digeſted and conſum'd; and then you may ſafely give him the Breaſt.

* *Five, ſix, or ſeven Days is uſual.*

It were to be wiſh'd that the Mother ſhould not give it ſuck, until the eighth day of her Childbed at ſooneſt, if not three Weeks or a Month; that ſo all the Humours of her Body, being well temper'd, and having recover'd the Agitation they receiv'd in the Travail, as alſo their Superfluities having been wholly purg'd by means of the *Lochia*, her Milk be thereby ſo much the more purify'd: beſides this, the ſmall Holes of the Nipples not yet being ſufficiently open'd, a new-born Babe cannot ordinarily at firſt eaſily draw her Breaſts; during that time therefore let a Woman ſuck her ſelf.

But often poor People cannot obſerve ſo many Precautions, and ſuch Mothers are oblig'd to give their Children ſuck from the firſt Day, and likewiſe others will not ſuffer any but themſelves to do it. In this Caſe, let their Breaſts be a little drawn by ſome old Perſons, or ſome luſty ſucking Child; or they may draw them themſelves with a Glaſs, figur'd like that in the beginning of *Chap.* 15. and afterwards they may give their Children ſuck when the Milk is a little brought down. Let them continue to do thus, till the Milk be eaſy for the new-born Child to draw.

There are ſome who believe that the Milk of a Woman new laid is better at the beginning than when it is purify'd, and that it opens the Belly, and purges the *Mæconium* from the Guts: but the Gripes, which this over-heated and foul Milk alſo cauſes in the Child, is much more prejudicial than the Good it otherwiſe doth; wherefore it is beſt not to give it ſuch new Milk, if poſſible. As to the fitteſt time then

then of giving the Breast to the new-born Babe, it must not be till after the first day, for the Reasons above given: and to make him take it, because there are some who will not in three or four days, the Nurse must milk a little into his Mouth and upon his Lips, that so he may by degrees taste it: then let her put the Nipple dropping into its Mouth, and squeeze her Breast with her Hand when he hath fasten'd, that the Milk may come down the easier, and that the Infant who hath yet but small strength, may not take too much Pains to draw and suck it; doing thus by degrees, until he is well accustom'd to suck.

If the Nurse hath much Milk, she must not give the Child any thing else, at least the first two * Months: Beasts do shew us, that Milk alone is sufficient to nourish an Infant, since that they do suckle five or six of their young ones, and sometimes more, without their taking any other Food for a long time after. As to the quantity of Milk a Child ought to suck, it must be proportionable to his Age and Strength; in the beginning he must not have too much, nor too often, that his Stomach, not yet accustom'd to concoct it, may the better digest it; afterwards let it daily, by little and little, be augmented, until he may take his Fill. As to the Time and Hour it needs no limits, for it may be at any time, Night or Day, when he hath a mind; but let him have it rather little and often, than too much at a time, that his little Stomach may the better concoct and digest it without Vomiting, as it often doth when it cannot easily contain it.

* *We daily see that Children brought up by hand, do commonly thrive as well as those that are suckled.*

After the Child hath suck'd Milk alone for two or three Months, more or less, according as one finds he needs stronger Nourishment, give him then Pap, made of Flower and Milk, tho' but little at first, and not too thick, lest his Stomach be soon over-charg'd

charg'd by not being us'd to it; or (that it may be of easier Digestion) put the Meal in an earthen Pan, into an Oven as soon as the Bread is drawn, stirring it often to dry it equally. Pap made of this Flower, besides that it is sooner concocted, is much better than the ordinary, which is heavier, clammier, and not so easy of digestion; for being made with raw Flower, 'tis very difficult to boil it well, without consuming the best Part of the Milk, leaving only the grossest Part behind, and losing by the long boiling both its Goodness and Taste. When the Child hath taken Pap thus made, which must be but once a day, especially in the Morning, or twice at most, the Nurse may give it a little suck, to the end that being wash'd down into the Stomach, the digestion may be the better and easier made.

There are many Women who give Pap to their Children as soon as they are born; and Nurses who have little Milk ordinarily do so, to hinder their crying, as they will do when they are hungry: but sometimes this only is enough to kill them, because of the Indigestion and Obstruction it causeth, which by reason of its gross and viscous Consistence, can hardly find Passage thro' the Stomach and Guts, which at the beginning are but weak, and not sufficiently open'd and dilated; whereby there happen to the Children great Oppressions, and Difficulty of Breathing, Gripes, Swellings, Pains of the Belly, and often Death. Wherefore do not give it the Child till after the first or second Month at soonest; and if you forbore it three or four whole Months, he would thrive the better, provided the Nurse want no Milk.

When the Child hath suck'd its Fill, let the Nurse lay it to Rest and Sleep, not in the same Bed she lies in, lest unawares she over-lay it; as I knew one that did and kill'd her Child, whether wickedly to be freed from it, or innocently, she alone knoweth: but to avoid this Mischief, let her lay it in a Cradle close

by

by the Bedside, and put a Mantle over the head of the Cradle to prevent the falling of Dust on its Face, and that the Daylight, Sunshine, Candle, or Fire in the Chamber, may not offend it. Lay him to sleep upon his Back, with his Head a little rais'd upon a Pillow; and to make him sleep the sooner, let the Nurse rock him gently with an equal Motion, without too great shaking; lest that hindering the digestion of the Milk in his Stomach, provoke him to vomit it up, just as Persons do who are at Sea; not because of the Scent of the Salt-Water, but the shaking and tossing of the Ship wherein they are; and as it happens to many Women only by riding in a Coach, when they are not us'd to it. But that you may not be forc'd thus to rock a Child every time you would have him sleep, it is good not to use him to it at first, but let his Sleep come naturally of it self. There needs no certain limited time for his Rest, for he may sleep at any time, Night or Day, when he hath a mind to it; and ordinarily the better he is, the more he sleeps. However, if his Sleep be very immoderate, it may be a little broken; to which purpose let his Nurse carry him in her Arms to the Light, singing with a soft and sweet Voice, shewing him some glistering thing to please his Sight, and dancing him a little to awake him out of his Drowsiness: for by too long Sleep the natural Heat doth so retire inwards, that it is as it were bury'd there; by means of which all the Body, and chiefly the Brain, is so cool'd, that the Infant's Senses are thereby quite dull, and their Functions languishing and stupify'd.

When he is in the Cradle, let it be so turn'd as it may be towards the Fire, the Candle, or the Chamber-Window, that having the Light directly in its Face, he may not be allur'd to look continually on one side; for doing so often, his Sight will be so perverted, that he will grow Squint-ey'd: Wherefore for the better security, throw some Covering over the

the head of the Bed, as we have ſaid, to hinder him from ſeeing the Light; becauſe by this means, his Sight being ſtaid from rolling from ſide to ſide, will be the better fortify'd. Let us now ſee how a Nurſe muſt daily cleanſe her Child from the Excrements.

As the Young of all other Animals have their Bodies free, without the Trouble of any Coverings, ſo they eaſily diſcharge themſelves of their Excrements, without being befoul'd; and they no ſooner empty their Belly, but their Dam (if they cannot do it themſelves) perceiving it, caſts it forth of their Neſt, or at leaſt rangeth it in ſome one part, where it cannot hurt them: But it is not the ſame with Infants, who (for being bound and ſwath'd with Swathes and Blankets, as we are forc'd, to give them a ſtrait Figure only ſuitable to Mankind) cannot render their Excrements, but at the ſame time they muſt be befoul'd, and in which (becauſe it cannot be perceiv'd for their Clothes) they often remain, until the ill Scent of it offends the Nurſe's Noſe; or that ſhe doubts it, becauſe of the Cries and Tears of the Child, which is incommoded by the Moiſtneſs and Acrimony of it; to avoid which let the Child be open'd and chang'd, at leaſt twice or thrice a day, and alſo ſometimes in the night, if neceſſary, to cleanſe him from his Excrements, and change the Bed, which ought to be well waſh'd, and not ſlightly, as moſt part of hir'd Nurſes do; which cauſeth a great Itching, and galleth the Child's Body, becauſe of a certain Salt coming from the Excrements, and not eaſy to be diſſolv'd when the Blanket hath once imbu'd it, but by putting it into a Bucking-Tub. The beſt time to ſhift the Child, is immediately after the Excrements are render'd, without ſuffering him to lie longer in them, than till he awakes, if he were then aſleep.

Now ſince he may render them at any hour indifferently, no other time can be appointed to do it but when

when there is moſt need, that is, as often as it is neceſſary to keep him always clean.

The Child muſt always be open'd before the Fire, and his Beds and Clouts well warm'd and dry'd, before he be put into them, leſt their Coldneſs and Moiſture cauſe a Cholick and Gripes. The Nurſe likewiſe muſt be careful, from time to time, to put ſoft Rags behind the Ears and under the Armpits, to dry up the Moiſture there found; being very careful, during the firſt four or five days, not to make the remaining part of the Navel-ſtring fall off too ſoon, and before the Veſſels of it be perfectly clos'd. Let her likewiſe ſee every time ſhe opens him, whether the Navel, for want of being well ty'd at firſt, do not bleed, or becauſe the Thread is looſen'd; and after the end is quite fallen off, let her ſtill for ſome time ſwathe the Navel, ever laying a Bolſter on the top of it, until it be well cicatriz'd and wholly depreſs'd, and as it were ſunk inwards. Beſides this let her put upon the Mold of the Head, under the Biggen, another Compreſs, as well to keep the Brain warm, as to defend it from outward Injuries which might eaſily hurt it, becauſe of the tenderneſs of that Place not yet cover'd over with any Bone. Let her alſo be very careful not to let the Child cry too much, eſpecially at the firſt, leſt the Navel be forc'd outwards, and that there happen to him by its dilatation an *Exomphale*, or a Rupture in the Groin: nor muſt ſhe hearken to the Sayings of ſome good People, who affirm it neceſſary a Child ſhould ſometimes cry to diſcharge its Brain. The two beſt ways to quiet him when he cries, is to give him ſuck, and lay him clean and dry: 'tis likewiſe good to preſent to his Sight things that rejoice him, and to remove what may affright or grieve him.

All theſe Directions in this preſent Chapter, concerning the Diet and Order of a new-born Babe, muſt be underſtood for one in Health; for if he be any ways

ways indiſpos'd, he muſt be treated according as the Caſe requires. This is what we intend to examine in all the remaining part of the Book.

CHAP. XIX.

Of the Indiſpoſition of little Children, and firſt of their Weakneſs.

YOUNG Trees are ſcarce rais'd out of the Earth which is their Mother, but often many of them ſoon after die: becauſe their ſmall Bodies, by reaſon of the tenderneſs of their Subſtance, eaſily receive alteration, and cannot without great difficulty reſiſt the ſmalleſt Oppoſition, until they become a little bigger, and have taken ſtronger and deeper Root: So likewiſe we ſee daily above half of the young Children die, before they are two or three Years old; as well becauſe of the Tenderneſs of their Bodies, as by reaſon of the Feebleneſs of their Age, they cannot otherwiſe expreſs the Incommodities they ſuffer within, but by their Cries. We have heretofore diſcover'd how they ought to be govern'd in the beginning for the preſervation of a good Health; we will now diſcourſe of the Indiſpoſitions to which they are ſubject, principally from their Birth, till they are ſeven or eight Months old. Let us firſt mention ſome they are born with, and then we'll entertain you with thoſe that uſually happen to them afterwards.

The firſt Accident to be remedied, is a Weakneſs many Children bring into the World with them; which often happens, not becauſe they are ſo by Nature, but by the violence of a bad Labour, or the length of it: during which they ſuffer ſo much, that ſome-

sometimes after they are born they are so weak, that it is hard to be discover'd whether they are dead or alive, not any Part of their Body being perceiv'd to stir; which sometimes is so blue and livid, especially the Face, that one would think they were quite choak'd. And many times, after they have been thus for whole Hours, they recover, by little and little, from their Weakness, as if they reviv'd, and were return'd from Death to Life.

One may guess that the Child is not effectually dead, altho' at first it doth in some sort appear so to be; if the Woman, but a little before she was brought to Bed, felt it stir strongly; if she did not flood much, and if she had no very hard Labour: But 'tis very certain he is yet living, altho' he do not cry, nor move any part of his Body after he is born; if laying the Hand upon his Breast, the Motion of the Heart be felt; or touching the Navel-string near the Belly, there is yet perceiv'd a small Pulsation of the Arteries. Then all sorts of means must be us'd to recover him out of this Weakness.

Now the best help in this case is, to lay him speedily in a warm Bed and Blanket, and carry him to the Fire; and there let the Midwife sup some Wine, and spout it into his Mouth, repeating it often, if there be occasion. Let her likewise lay Linen, dipt in warm Wine, to the Breast and Belly; let the Face be uncover'd, that he may draw Breath the easier; and to be yet more helpful to him, let the Midwife keep his Mouth a little open, and cleanse the Nostrils with small Linen Tents, dipt in White-Wine, that so he may receive the smell of it; let her chafe every part of his Body with warm Clothes, to bring back the Blood and Spirits, which being retired inwards, thro' Weakness, puts him in danger of being choak'd. In doing thus by little and little, the Infant recovering his Strength, will insensibly come to stir his Limbs one after another, and so at first cry but weakly; which

which afterwards, as he breathes more freely, will augment and become ſtronger.

Beſides theſe Helps we have mention'd, which certainly are the beſt and moſt certain for the Weakneſs of a new-born Babe, Midwives ordinarily make uſe of others, which I do not approve of, not only becauſe they are uſeleſs, but becauſe ſome of them are very dangerous to the Child. Some lay the After-burden, being very warm, to the Belly, and leave it there till it is cold. I have elſewhere declar'd, that the Burden, by reaſon of its Heat, may be ſomething ſerviceable; but notwithſtanding, becauſe of its weight, being ſo plac'd upon the Child's Belly, which wanting a Support, is eaſily compreſs'd, it doth very much hinder his Reſpiration, which at that time is moſt neceſſary for him. Others caſt the *Secundine* into the Fire before it be parted, and ſome put it in warm Wine, believing that by this means the ſtrength of the Wine convey'd thro' the *Umbilical* Veſſels, is able to give him new Vigor. But as this fleſhy Maſs, and theſe Veſſels, are dead parts as ſoon as they are out of the Womb, ſo there remain in them no Spirits which can be communicated to the Infant: And if this Practice be continu'd, it muſt be rather to ſatisfy Cuſtom, than for any hope of Benefit to be thereby receiv'd.

If theſe things do no good, yet do they no great hurt, but are only uſeleſs; but this which follows is capable to ſuffocate a Child immediately, that is, when ſome do thruſt back, and make the Blood which is in the *Umbilical* Veſſels to enter into the Body, believing that it fortifies and recovers the Child out of its Weakneſs. But we have elſewhere declar'd, that the Blood contain'd in theſe Veſſels, loſe their Spirits as ſoon as the *Secundine* is ſeparated and come forth of the Womb; nay, it is there, immediately after, half congeal'd. Now if it be thus thruſt back into the weak Child's Liver, it remains there, being no longer

longer animated with any Spirits; and inſtead of giving him new Strength, it overcomes that little which remains, and compleats the Extinction of his languiſhing natural Heat. To avoid this, be careful not to force back the Blood thus into the Infant's Belly; for beſides in theſe Weakneſſes (unleſs it ſhould be otherways by the Mother's flooding before ſhe was brought to Bed) there is always too much of it in the Infant's Body; and inſtead of ſending more to it, there muſt be ſome drawn back from it towards the Extremities, that ſo its Ventricles being a little diſcharg'd, may have afterwards a more free Motion to ſend back the Spirits to all parts, which are depriv'd of them by theſe Faintings. Wherefore ſince the Child muſt receive nothing from the *Umbilical* Veſſels after its Birth, let them be tied as ſoon as may be, and then order'd according as we have directed.

Very often the Children which are weak at their Birth, are ſo by Nature, as when they come before their time; and are ſo much the weaker, by how much they want to compleat the end of the 9th Month, and alſo when they are begotten by infirm and ſick Parents.

Theſe are hard to remedy, and there is nothing more to be done, but to nouriſh and order them well, according to our former Directions: but it will be rare for them to be long-liv'd, and it is much if they do not die by the leaſt Indiſpoſition that befals their natural Weakneſs.

CHAP.

CHAP. XX.

Of Contuſions, or Bruiſes of the Head, and other Parts of the Body of a new-born Babe.

THE Bodies of new-born Children are, as we have ſaid, ſo tender and delicate, that they are eaſily bruis'd and hurt; and ſometimes in a bad Labour their Members are diſlocated, either becauſe it remain'd long in an unnatural Poſture, or becauſe they were handl'd too rudely in the Operation. The moſt uſual and frequent Bruiſe is for the moſt part on the top of their Head, where ſometimes at their Birth, they have a Knob as big as half an Egg, if not bigger, as is uſually ſeen in firſt Labours; and which happens the ſooner, according as the Woman is advanc'd in Age, becauſe the inward Orifice of the Womb, call'd the Garland, being more callous, doth not dilate without much difficulty; for which reaſon, the Child's Head preſſing againſt it, and the upper part of it (which naturally preſents firſt to the Paſſage) being begirt with it as with a Garland, is puft up and ſwell'd (becauſe of the Blood and Humours which fall down, and are retain'd in this part) by the great Compreſſion which this inward Orifice makes round about, eſpecially when the Throws begin to be ſtrong, and the Child comes but ſlowly forward, after the Waters, which did a little defend it, are broke away. The Midwife alſo may do much ill in it, if ſhe toucheth it too often, or too roughly with her Fingers, when it lies in the Birth; but many times they are in this caſe wrongfully accus'd; becauſe, for the moſt part, the ſingle Compreſſion this Orifice makes in the form of a Garland about the Child's Head, is the cauſe of this kind of bruis'd Tumours.

This part swells after the same manner as we see all others, which are either too strongly prest, bound, or lac'd: for by this means, the Blood which cannot circulate, being stopt in great abundance in one part, obligeth it to swell and be blown up; and by the Repletion it makes, renders it livid, as if it were bruis'd. Now this Compression is much greater in respect of the Veins, which are always more outward, and ought to carry back the Blood to the Heart, than of the Arteries, by means of which it is carried to all the Parts; for besides that the Arteries lie deeper, they have also a continual Pulsation, by the favour of which a little Blood ever slides away. And this is the reason that in all Compressions or Ligatures of Parts, provided they be not too hard, the Blood is easily carry'd into them by the Arteries, and but very hardly, or not at all, carry'd back by the Veins; which is the reason that the Part receiving much more than it sends back or consumes for its Nourishment, must needs swell on this fashion by Repletion. If they that practise Midwifery do but well consider what I have said, when Occasion offers, which is very often, they will find that these kind of Knobs or Tumours, which many Children have on their Heads at their Birth, proceed ordinarily from no other Cause than what I have here explain'd.

These Tumours many times are so great and high, that (the Woman not being yet deliver'd, nor having the inner Orifice of the Womb well dilated) they do hinder the Discovery of the part which the Infant first presents; making Midwives sometimes to imagine, not being able to feel any Bone of the Head with their Finger, that it is the Child's Shoulder, or some other Part; nay, some of them cannot tell what that Swelling is they feel: but they may soon know it, by reason these Tumours, tho' feeling very fleshy at the touch, are notwithstanding harder than any Shoulder, or Buttock of a Child, which

Parts

Parts are always more ſoft and without Hair, as the Head is not, the Bones of which may alſo be eaſily perceiv'd, if having the Finger anointed with Oil or freſh Butter, it can be introduc'd into the inner Orifice: for the Parts of the Head, within the Womb, are not ſwell'd; 'tis only this which offers to the Orifice, and is preſt and begirt by it, as we have ſaid. If a Child comes with any other part beſides the Head, as an Arm or a Leg, and that theſe Parts likewiſe remain a long time preſt in the Paſſage, and in a poſture much conſtrain'd, or that they be come forth, they likewiſe ſwell for the ſame reaſon.

There muſt not only be Remedies apply'd to theſe Knobs and Bruiſes of young Childrens Heads, but Endeavours muſt be to prevent them, or at leaſt to hinder them from becoming ſo big. The means to prevent them, is to procure the Delivery as ſoon as may be, that the Infant's Head may not reſt ſo too long, and be ſtraiten'd by the Garland of the inner Orifice of the Womb, which muſt be well anointed with Oil, or emollient Ointment, as well to further its Dilatation, as that the Head may the ſooner and the eaſier paſs.

Some may object, That if theſe Tumours happen from the Cauſe I have mention'd, they would diſappear as ſoon as the Infant is born; becauſe then the Head being no longer preſt, nothing hinders the Blood, which had tumefied the Part, from returning, having its Motion free. But they muſt know, that by its too long ſtay it makes in one Part, it loſeth the Spirits which are there ſuffocated; of which being deſtitute, it can no longer move: and being flown without the Veſſels, out of its natural Place (as it will be, when the Veſſels containing it are too full) it ſlides into all the little Vacuities of the Part, for which cauſe it cannot afterwards return by the ordinary ways: wherefore there is a neceſſity in this Caſe, either that it be reſolv'd thro' the Part, or if it ſtay

any time, that it comes to Suppuration; which however muſt be avoided, if it be poſſible, becauſe of the nearneſs of the Brain, which in Infants is not cover'd over with the Scull at the *Sutures*, which are always very open, eſpecially towards the Mould.

To reſolve theſe Tumours then, as ſoon as the Child is born, foment them with warm Wine, or *Aquavitæ*, and wetting a Compreſs in it, put it upon them. Some Midwives only dip a Compreſs in Oil and Wine beat together; others in Oil of Roſes only, having firſt fomented them with Wine: but if, notwithſtanding this, they come to Suppuration, the matter muſt not be ſuffer'd to remain there too long, for fear leſt the Bones of the Head (which are very tender and thin in new-born Children) become alter'd and foul; in this Caſe, it muſt be open'd with a Lancet in a proper place, according to Art, putting upon it afterwards a Plaiſter of *Betony*. If a Leg or an Arm be thus ſwell'd, it muſt likewiſe be wrap'd up with Compreſſes dipt in Wine, wherein Province-Roſes, Camomile-Flowers and Melilot have been boil'd.

Sometimes alſo Male-children have the *Scrotum* very much ſwell'd, which may happen to them by reaſon of ſome Waters contain'd in their Membranes; or becauſe they were bruis'd, or too rudely handl'd by the Chirurgeon or Midwife, in the Labour. In theſe caſes, Compreſſes dipt in Wine with Roſes, are very proper to both.

But the greateſt Miſchief is, when the Chirurgeon (being either inexpert and unhandy in ſuch an Operation, or becauſe of a bad Labour it could not poſſibly be otherwiſe) breaks or diſlocates a Leg or an Arm of the Child in extracting of them: if it thus happens, you muſt afterwards help it, by putting together the Parts, and keeping them ſo with fit Boulſters, or Splinters, in their natural Situation, until they ſhall be well clos'd and fortified.

CHAP.

CHAP. XXI.

Of the Mould of the Head, and of the Sutures *being too open.*

VERY often Children, who come before their time, not having yet acquir'd their full Perfection, as alſo they which are by Nature weak, have the Mould of their Head, and the *Sutures* ſo open, by the Diſtance and Separation of the Bones one from another, that it is very ſoft and almoſt without any Support, becauſe the Bones eaſily yield to every ſide; theſe Children are not uſually long-liv'd. One muſt not think then to bring the Bones cloſe together, by binding the Head ſtrait; for this would ſo preſs the Brain, which is very tender, that it would cauſe a worſe Malady, in taking away the liberty of its Motion, whereby its Functions would be deprav'd, and afterwards totally aboliſh'd. It will be ſufficient to bind them ſoftly with a ſmall Croſs-cloth, leſt they ſhould be too unſteddy, and commit the reſt to Nature's Work, which by degrees will cloſe up theſe *Sutures* (in finiſhing to ingender) and dry up and unite theſe Bones of the Head, which were not hitherto perfectly form'd.

The place where the *Sagittal Suture* joins and terminates, in the midſt of the *Coronal*, which it always in every Child divides in two, continuing to the very root of the Noſe, is call'd * the Fountain of the Head, becauſe 'tis the ſofteſt and moiſteſt part of it, which for this reaſon is the laſt dried and clos'd up. The Figure of it is repreſented in the Head, plac'd at the beginning of this Chapter.

* *Mould.*

There are Children who have it ſometimes open till they are three Years old, if not longer, which is

a great ſign of the weakneſs of their natural Heat. It is uſually quite clos'd up at the end of two Years, and ſooner or later, according as the Infant is more or leſs moiſt, or more or leſs ſtrong. Until theſe Bones are entirely clos'd, 'tis convenient to lay upon that place (as we have already elſewhere directed) a Linen Compreſs three or four double, to defend the Head, as well from Cold, as other external Injuries. Some Women keep a piece of Scarlet Cloth a long time to it, thinking that it doth ſtrengthen the part more: 'tis no matter what one uſes, provided it will keep the Brain warm, and hinder any hurt in that place, which is not as yet cover'd over with any Bone.

It happens ſometimes, that altho' the Bones of the Head be big enough to unite in all Parts, if they were not hinder'd, they are however extremely diſtant one from the other in the place of the *Sutures*, becauſe of the quantity of Waters contain'd between them and the *Dura Mater*: this Malady is call'd *Hydrocephale*, of which there are many Sorts, according as the Waters are nearer or further from the Brain, or that they are contain'd within its Ventricles. When the Waters are between the Skin and the *Pericranium*, or between the *Pericranium* and the Scull; the Children may be cur'd of it, if the Tumour be not too great, by reſolving of theſe Waters, or emptying them by an Inciſion: but if they are in great abundance, under the Bones, between them and the *Dura Mater*, thruſting them ſo outwards, and enlarging the *Sutures*, the Children cannot eſcape it; which is yet ſo much the more impoſſible, if the Waters are contain'd between the *Dura* and the *Pia Mater*, or within the Brain.

CHAP.

CHAP. XXII.

Of a new-born Babe's Fundament being clos'd up.

IT happens sometimes that young Children, as well Male as Female, are born with the Fundament close stopt up; for which reason they cannot render nor evacuate, neither the new Excrements engender'd by the Milk they suck, nor the *Meconium*, which was amass'd in their Intestines, whilst they were in the Mother's Belly: of which Disease they certainly die, if not speedily remedied. There have likewise sometimes been Girls, who, having the Fundament clos'd, yet voided the Excrements of the Guts by an Orifice, which Nature, to supply its Defect, had made within the *Vagina*, or Neck of the Womb.

Now the Fundament is clos'd two Ways; either by a simple Membrane, as the single Skin, thro' which one may perceive some livid Marks, proceeding from the retain'd Excrements; and touching it with a Finger, there is felt a Softness within, whereabouts it ought to be pierc'd: or else it is quite stopt up by a thick fleshy Substance, and in such sort, that there appears nothing without by which its true Situation may be denoted.

When there is nothing but the single Skin which makes this Closure, the Operation is very easy, and the Children may escape. Then an Apertion may be made with a small Incision Knife, cross ways rather than simple or long, that it may the better receive a round form; and that the place may not afterwards grow together, being very careful not to hurt the *Sphincter* of the *Rectum*. The Incision being thus made, the Excrements will certainly have Issue: but if because of their long stay in the Belly, being be-

become dry, the Infant cannot void them, some small Clyster must be given it to moisten and bring them away; afterwards put a Linen Tent into the new-made Fundament, lest it close again, which must be at first anointed with Honey of Roses, and towards the end with a drying and cicatrizing Ointment, as *Unguentum Album*, or *Pompholix*; observing to cleanse the Infant of his Excrements, and dress it again as soon and as often as he renders them, for fear lest their staying too long there, may turn the Apertion into a malignant Ulcer.

If the Fundament be so stopt up, that neither Mark nor Appearance is seen or felt, then the Operation is much more difficult; and altho' it be done, it is a great Hazard if the Infant escapes it: wherefore if it be a Girl, which empties her Excrements by the *Vagina*, as it sometimes happens, 'tis better not to meddle with it, than by endeavouring to help an Inconvenience, cause the Child's Death. But when there is no Vent for the Excrements, there is a necessity to come to the Operation, tho' it be very perilous, without which Death would undoubtedly follow.

To do this well, altho' there be no outward marks of a fit place, because of the thickness of the Flesh which is upon the Intestine, let the Chirurgeon, with a small Incision Knife that hath but one Edge, enter into the void place; and turning the Back of it upwards, within half a Finger's breadth of the Child's Rump, which is the Place where he will certainly find the Intestine, let him thrust it so forward, that it may be open enough to give it free Vent to the Matters there contain'd; being always very careful of the *Sphincter*: after which let the Wound be dress'd according as we have above directed, having regard to the Accidents which may follow.

When it happens, as it is very possible, that the Urinary Passage, as well of Male as Female, is stopt up,

up, the like Apertion muſt be made to give paſſage to the Urine contain'd in the Bladder; and afterwards a ſmall leaden Pipe muſt be introduc'd into it, to keep the Paſſage open, until the Inciſion there made by a Lancet be cicatriz'd. But as it is very difficult to have ſuch a Pipe retain'd in a little Boy's Yard, which becauſe it is ſo ſhort, will admit of no proper ſwathing, it may be let alone, ſince the Urine which he renders at all Hours, will hinder the Apertion from cloſing.

CHAP. XXIII.

Of cutting the Tongue when Tongue-ty'd.

THE Tongue is naturally ty'd with a Ligament ſufficiently ſtrong, faſtned juſt underneath in the middle of it, to be inſtead of a Support; upon which being ſuſtain'd, it may make all its different Motions on either ſide. This Ligament ought to leave it an entire Freedom, of being carry'd and ſupported in all places of the Mouth: wherefore it muſt not be ſo ſhort nor ſo faſtned, but at a convenient diſtance from its extremity, which muſt be perfectly free on all ſides. But often new-born Babes have before it a ſmall membranous Production, uſually call'd the String, which is continu'd almoſt to the end of their Tongue, and taking away the liberty of its Motion, hinders them from ſucking with eaſe; becauſe the Tongue being kept down, and, as it were bridled with this Thread, the Infant cannot move it upwards (as it is neceſſary) to preſs the Nipple with it againſt the Palate, and to ſuck it to draw the Milk; neither can it move it commodiouſly to ſwallow it afterwards.

To remedy this Inconvenience, you muſt not do as ſome Women do, and tear this Thread with your Nails,

Nails, for that may make an Ulcer there, which afterwards would be hard to cure: but carry the Child to a Chirurgeon, and he will cut as much or as little of it as he thinks needful, with sharp Scissers, cutting at the Point; being careful not to cut the proper Ligament of the Tongue, nor to open the Vessels which are under it. To do this Operation handsomly, let him heave up the Child's Tongue with one or both of his Fingers, which he must put under and on the sides of it, that he may discover what is necessary to be cut. But since new-born Children have often their Mouths so little, that it is very difficult so to lift up their Tongue with your Fingers, which being within the Mouth, doth likewise hinder you from seeing what is fit to be done, let the Chirurgeon for this purpose make use of an Instrument, made like a small Fork, as is represented in the beginning of the Chapter; of which let him put the two small Branches (which must be blunt at the Points) underneath the middle of the Tongue on each side of the String, and then lifting it strait up, he will easily command it; by means of which he will make his Operation more commodiously and certainly.

This Instrument, because it is little, will not hinder the Inspection into the Mouth, as the Fingers which are too big will do. After that the Tongue is thus dexterously cut, the Nurse must every Day twice or thrice pass her Finger, being very clean, underneath it, to prevent its growing together again; doing it very gently, for fear of irritating the small Wound, that it may not be inflam'd; which will be a greater hinderance to the Child's sucking, and that it turn not into an ill-natured Ulcer.

CHAP.

CHAP. XXIV.

Of Gripes and Pains of the Belly of a young Child.

MANY Children are ſo grip'd, that they cannot forbear crying Night nor Day, for the great Pains they feel in their Belly; with which ſome are ſo vext and tormented, that they die of it. 'Tis very often the firſt and moſt common Diſtemper which happens to little Infants after their Birth: which in general, and for the moſt part, comes from the ſudden change of their Nouriſhment; foraſmuch as having always receiv'd it by the *Umbilical* Veſſels, whilſt they were in the Mother's Belly, they come to change it of a ſudden, not only the Manner of receiving it, but the Nature and Quality of it as ſoon as they are born: for inſtead of purify'd Blood only, which was convey'd to them by means of the *Umbilical* Vein, they are oblig'd, for want of it, to be nouriſh'd with their Mother's Breaſt-Milk, which they ſuck with their Mouth, and from which are engendred many Excrements, cauſing the Gripes, as well becauſe it is not ſo pure as the Blood with which it was fed in the Womb, as becauſe the Stomach and Inteſtines cannot yet make a good Digeſtion, nor an eaſy Diſtribution, being not accuſtomed to it.

The particular Cauſes of theſe Gripes are, either when the *Mæconium* (amaſs'd during all the time of Pregnancy) is not evacuated ſoon after the Infant's Birth, and that by its too long ſtay in the Inteſtines, it acquires a ſharp and pricking Acrimony; or that becoming hard, the Infant cannot void it, nor the new Excrements which proceed from the Milk, which he hath taken at the firſt. 'Tis alſo ſometimes becauſe the Child not being able to ſuck with Eaſe, he ſwallows, in ſucking the Milk with Difficulty, much Air and

and Wind; which being retain'd in the Stomach, and sliding into the Intestines, doth painfully distend them. This Wind is sometimes caus'd, when a Child takes a greater quantity of Milk than he can digest; or because of its ill quality, as when the Woman gives her Breast-Milk as soon as she is delivered, without staying to have it purify'd. Cold may also make it suffer the same. But very often it is by giving him Pap too soon, as also when it is not enough boil'd; because this Nourishment, which is gross and viscous, cannot be easily digested by a new-born Babe, whose Stomach is not yet accustom'd to it; and Worms that are engendred in the Intestines, by their stirring and biting, do also much torment them. Besides all these things already mention'd, the Midwife also may cause great Pains in the Child's Belly, by driving back into it the cold and clodded Blood out of the Navel-String before it be ty'd.

For to remedy all these Pains in the Belly, which Women usually call all by one common name of Gripes, respect must be had to their different Causes. As to that which is the general Cause, the too sudden change of the Nourishment; to avoid it, one must forbear giving the Child suck, until the next day, lest the Milk being mixt with the Phlegm which is then in the Stomach, corrupt; and at first it must suck but little, until it be accustom'd to digest it. If it be the *Mæconium* of the Intestines, which by its long stay causeth these Pains; to help to discharge them of it, give them at the Mouth a little Oil of sweet Almonds, and Syrup of Roses, as we have directed before; and to provoke it further, give it *Beets* Stalk, cover'd over with Honey, for a Suppository; or a sugar'd Almond also dipt in common Honey, or one may give it a small Clyster.

If a Child cannot suck with ease, regard must be had to that which hinders it; for if it be Tongue-ty'd, it must be cut, as is above-directed: and if it be be-

cause

cauſe the Nurſe is hard milcht, change her for one whoſe Milk is better purify'd; and let her rather ſuckle it a little and often, than more at once than the little Stomach can eaſily digeſt at a time. And above all, whilſt the Child is grip'd, give it no Pap; becauſe this Food, by its viſcoſity, doth eaſily cauſe Obſtructions, which afterwards engender Wind. If it be Worms, lay a Cloth dipt in Oil of *Wormwood* mixt with Ox-Gall, upon the Belly; or a ſmall *Cataplaſm* mixt with Pouders of *Rue*, *Wormwood*, *Coloquint*, *Aloes*, and the Seed of *Citrons*, incorporated with Ox-Gall and Flower of *Lupines*. And to draw and drive them more downwards, if the little Infant can take any thing by the Mouth, give it a ſmall Infuſion of *Rhubarb*, or half an Ounce of compound Syrup of *Succory*; having before given it a ſmall Clyſter of ſugar'd Milk: for by this means the Worms, which ſhun the Bitterneſs of the Medicines, and ſeek after the Sweetneſs of the Milk, are eaſily brought away by Stool.

When theſe Gripes are caus'd by Wind, as it often happens, or by any ſharp Humours in the Inteſtines, anoint the Child's Belly all over with Oil of *Violets*, or with Oil of ſweet *Almonds*, or elſe with Oil of *Walnuts*, *Camomile*, and *Melilot* mixt together, having firſt warm'd them, in which alſo a Cloth may be dipt to lay upon it; or a ſmall Pancake may be made with an Egg or two fry'd in Oil of Walnuts, to be apply'd to it: and they may take a little *Anodine* or *Carminative* Clyſter, according as the Cauſe of the Gripes is known; above all, ever keeping the Child very * warm.

* *If theſe Gripes increaſe, give it a little Antidote or Emetick.*

CHAP.

CHAP. XXV.

Of the Inflammation, Ulceration, or Shooting forth, or Rupture of the Navel of a young Infant.

THE continual Cries of little Children, becauſe of the Pains and Gripes which they feel at the beginning, do ſometimes cauſe ſuch an Agitation of the Belly, that the Navel-ſtring falling off too ſoon, and before it be entirely clos'd and cicatriz'd, there happens an Inflammation and Ulceration. At other times alſo, for the ſame reaſon, altho' it be outwardly heal'd, not being ſo within, it is dilated and thruſt outward the bigneſs of a ſmall Egg, and ſometimes bigger; which is uſually call'd *Exomphale*, or ſhooting forth of the Navel.

There are ſome who imagine, when it is ſo inflam'd and ulcerated, that it was becauſe the String was ty'd too near the Belly, which caus'd a great Pain and Inflammation to follow. Others ſay that Nature having us'd to diſcharge the Urine by this part, during the Child's being in the Mother's Belly, doth ſtill continue to ſend it this way, and that it cauſeth this Accident by its Acrimony, for which there is no reaſon: for 'tis impoſſible the Urine ſhould regorge from the Bladder to the Navel by the *Urachus*; foraſmuch as it is not hollow in an human *Fœtus*, as we have elſewhere made appear. And how near the Belly ſoever the Navel-ſtring is ty'd, and how hard (provided ſome of the true Skin, which is ſenſible, be not alſo ty'd with it) it can cauſe no manner of Pain to the Child; becauſe it is a dead and inanimate part as ſoon as a Child is born, and likewiſe inſenſible, there being no Nerve diſtributed into it. But this Inflammation uſually comes, as I have mention'd,

mention'd, becauſe the Infant, feeling the great Pains and Gripes in his Belly, doth continually cry, and thereby hinders the Navel from healing: it may likewiſe be caus'd by a violent and frequent Cough, becauſe, by theſe Efforts, the Blood is forc'd back into the remaining end of the *Umbilical* Vein, which it always keeps dilated; and being corrupted by its ſtay there, fails not to make an Inflammation of the Navel: and that which was ty'd coming to fall off before it was perfectly heal'd, there remains a very bad Ulcer, upon which ſometimes follows a great loſs of Blood, and it may be Death.

The principal Thing to be obſerv'd in the Cure of this Malady, is to appeaſe the Cough, and quiet the Child's crying, reſpecting that which cauſes it, without which it would daily increaſe; and if it were the Gripes, it muſt be remedy'd, as is directed in the foregoing Chapter. As to the reſt, if the Navel be inflam'd, one muſt lay upon it *Unguentum refrigerans Galeni*, mixt with as much *Populeon*; or a ſmall Bolſter dipt in Oil of Roſes with a little Vinegar: *Unguentum Roſatum & Album*, mixt together, is alſo good for it. If the Navel continues ulcer'd, after the String is fallen off, *deſiccative* and *aſtringent* Medicines muſt be apply'd to it, ſuch as ſmall Rags dipt in Lime-Water which is not too ſtrong, or Plantane-Water, wherein a little Allum hath been diſſolv'd. If the Ulcer be ſmall, a Pledgit of dry Lint will be ſufficient. Many put to it only a little Powder of a Poſt. Theſe things are better for this purpoſe than Plaiſters, which are never ſo drying, becauſe of the Oils and Greaſe which enter into their Compoſition. But if notwithſtanding one would uſe them, he may take *Deſiccativum Rubrum*, or *Diapompholigos*; particularly obſerving to put a good Linen Compreſs on the top of theſe Remedies, with a Swathe to keep them faſt, until the Navel be cicatriz'd and perfectly heal'd; leſt beſides its Ulcera-

tion,

tion, it be forc'd outwards, and that its Vessels open by the violence of a great Cough, or by the agitation which the Gripes cause in the Child's Belly.

As to the Rupture of the Navel in young Children, whether great or little, the Cure of it must not be otherwise undertaken than by Swathes and Compresses fitted for the purpose, till they have acquir'd a more reasonable Age, when, if the Malady be not cur'd by the Swathes, the Operation may be done if desir'd. But if after the Inflammation there grows an Impostume, which causeth the shooting forth of the Navel, and that the Tumour of it be very great, then it ever kills the Children: and if it be open'd, the matter indeed may be empty'd, but there is great danger that together with it the Guts come forth in the same place the first time the Child cries; which may afterwards persuade those that understand not the Art, that this Accident happen'd thro' the Chirurgeon's Ignorance. For this reason *Ambrose Paré*, in his 94th Chapter of his Book of Generation, adviseth you not to meddle with it, but rather to let the Child die, without doing any thing to it, as he saith he did himself, when he was sent for by a Taylor in the like Case.

He recites in the same place a Story of a Chirurgeon of his time, call'd Mr. *Peter de la Rock*, who was in very great danger of his Life, for having open'd an Impostume of the Navel of a Child of *Monsieur de Martigues*; which being done, the Intestines came forth by the Orifice, and soon after the Child dy'd, which the Servants of the House reported was thereby caus'd; and therefore (altho' without reason) they would have kill'd him, if the said *Monsieur de Martigues* had not hinder'd them: but I believe the Chirurgeon had shun'd the Danger they put him in, and that Disgrace, if he had before made a good Prognostick of what would follow, and the Danger wherein the Infant was; for it may be, resembling many

of

of our time (who undertake such things that they may be thought more able than others, and being but simple Fellows, boast themselves capable to work Miracles) he had promis'd speedily to cure the Child of this Malady, which was incurable, that (under so fair hopes) he might have a good Sum in hand paid him. In this we must follow *Paree*'s Advice with some distinction; for if the Imposthume be small, and the Child strong, one must not forbear, having first made a good Prognostick to open it: and when there is ever so little hope, 'tis better to practise what Art commands, than to forsake the Sick in a certain Despair.

CHAP. XXVI.

Of the Smartings, Redness and Inflammation of the Groin, Buttocks, and Thighs of the Infant.

IF the Nurse doth not keep the Child very cleanly, not changing the Beds, or washing them each time, or as soon as they are foul'd with their Excrements, their Acrimony will not fail to cause Redness and Smartness in the Groins, Thighs and Buttocks; and afterwards, because of the Pain, these Parts will inflame, which easily happens by reason of the tenderness and delicacy of their Skin; from which the * *Epidermis* is at length separated and worn away, if timely Care be not taken.

* *The outward Skin of the Body.*

The Cure of these Indispositions is twofold; that is, first to keep the Child cleanly; and secondly, to take off the sharpness of its Urine. As to the first, the Nurse must cleanse the Child of his Excrements as soon as he hath voided them, shifting it each time with a clean Bed, wash'd in the Buck. As to the se-

cond thing to be observ'd, of tempering the Child's Urine, that cannot be executed but by the Nurse's keeping a cooling Diet, that so her Milk may have the same quality; wherefore let her abstain from all things that may heat her.

Besides these two generals, cooling and drying Remedies must be apply'd to the inflam'd Parts: wherefore each time the Child's Excrements are wip'd off, let the Parts be bath'd with Plantane-Water, mixt with a fourth part of Lime-Water; and if the Pain be very great, let it only be fomented with luke-warm Milk.

Many Women ordinarily use the Powder of a Post to dry it, or a little Mill-Dust, which they strew upon it. *Unguentum Album*, or *Diapompholigos*, spread upon a small Rag in form of a Plaister, will not be amiss: above all, when the Nurse opens the Child, let her be very careful to wrap the inflam'd Parts with fine white Rags, that those Parts may not, by rubbing together, be more gall'd and pain'd.

CHAP. XXVII.

Of the Ulcers (or Thrush) *of the Mouth of an Infant.*

VERY frequently the Milk of a Nurse, who is Red-hair'd, given to Wine, or very Amorous, may by its Heat and Acrimony cause small Ulcers in an Infant's Mouth, which are call'd *Aphtæ*, and vulgarly *Cancers*. Sometimes also tho' the Milk have no ill quality in it self, it may however corrupt in the Child's Stomach, because of its Weakness, or for some other Indisposition; in which acquiring an Acrimony, instead of being well digested, there arise thence biting Vapours, which forming a thick Visco-

sity,

ſity, ſticking like a kind of white Soot all over the Mouth, do eaſily cauſe and engender theſe ſmall Ulcers, by reaſon of the Tenderneſs and Delicacy of it. This *Guido* makes us take notice of, when he ſays, that theſe Ulcers for the moſt part happen to Children by the badneſs of the Milk, or by its ill Digeſtion.

Of theſe Ulcers, ſome are benign, as they that are caus'd by the ſimple Heat of the Nurſes Milk, or by the Child's Blood and Humours being a little overheated; or alſo for having had a ſmall Fit of a Fever: and they are then very ſuperficial, of ſmall Continuance, and eaſily yielding to Remedies. Others are malignant, ſuch as are caus'd by a venereal Venom, or that happen after a malignant Fever, and are Scorbutick, which are putrid, corroſive, and ſpreading: and do not only poſſeſs the Superficies of the Membranes, which cover the Roof of the Mouth and Tongue; but making its Scabs deeper, is communicated to all the internal Parts of the * Throat, as the Venereal ones eſpecially, which can never be cur'd by ordinary Remedies, but muſt be handled with Speciſicks, without which they ever augment, and ſoon kill little Infants, who are too weak to undergo the Remedies for their Cure.

* *Oft-times they have a thorough Thruſh, even to the Fundament.*

The Ulcers of the Mouth, according to *Galen*, are of difficult Cure; becauſe they are in hot and moiſt Places, where eaſily Putrefaction and Corroſion is augmented: beſides, the Remedies apply'd cannot lodge there, being ſoon waſh'd away with Spittle.

To cure theſe Ulcers when they are ſmall and without malignity, you muſt take care to temper and cool the Nurſe's Milk, preſcribing her a cooling Diet, bleeding and purging her alſo, if there be occaſion. Waſh the Child's Mouth with Barley or Plantane-Water, and Honey of Roſes, or Syrup of dry Roſes;

mixing with them a little Verjuice, or Juice of Lemons, as well to loosen and cleanse the viscous Humours which cleave to the inside of the Child's Mouth, as to cool those Parts which are already overheated. This may be done by means of a small fine Rag fastned to the end of a little Stick, and dipt in this Remedy, wherewith the Ulcers may be gently rub'd; being careful not to put them to too much Pain, lest by irritating of them, an Inflammation be caus'd to augment the Malady. The Child's Body must be kept open, that the Humours being carry'd to the lower Parts, so many Vapours may not ascend, as usually do when the Excrements of the Belly are too long retain'd.

If the Ulcers participate of any Malignity, let Topical Remedies then be us'd, which do their Work speedily, and as it were in an instant, to correct the evil qualities of the Humours that cause them, and prevent their further augmentation. For it being impossible, if they should remain long in these Parts, but their effect and virtue would be hindred, or much diminish'd by the moisture of the Mouth; for this purpose touch the Ulcers with Water of Plantane, sharpned with Spirit of Vitriol, taking great care that the Infant * swallows none of it: and the Remedy must be so much the stronger and starper, as the Ulcers are profound and malignant. As soon as they have been cauteris'd with this Water, by only touching them once or twice with it, according to their Bigness, Depth, or Corruption, that no sharp Serosities may distil upon the Places not yet ulcer'd, and upon the Infant's Throat, wash its Mouth with Plantane Water, or with a Decoction of Barley, Agrimony, and Honey of Roses; continuing to touch and wash the Ulcers as it may be judg'd convenient, and until you find that they spread no further. To prevent that in the use of these sharp Medicines, not the least

* *No harm if it doth.*

leaſt Portion of them may fall upon the Child's Throat, and that by ſwallowing of them he may receive no great prejudice: Some chuſe rather to cauterize theſe Ulcers with ſmall Linen Tents, dipt in boiling Oil, which tho' afterwards ſwallow'd, cannot in the leaſt prejudice him. It will alſo not be amiſs to purge the ill Humours out of the whole habit of the Child, giving him half an Ounce of Syrup of *Succory* with *Rhubarb*.

If theſe Ulcers are maintain'd by a Venereal Venom, theſe Remedies may for ſome time hinder their Increaſe; but they will never be cur'd, unleſs ſuch as are more ſpecifick to that Malady be apply'd, as we ſhall hereafter direct.

CHAP. XXVIII.

Of the Pain in breeding the Teeth.

THE Teeth, which were hidden in the Jaws, uſually begin to come forth, not all at a time, but one after another, towards the fifth or ſixth Month, ſometimes ſooner, and ſometimes later; to effect which, they * cut the Gums wherewith they were cover'd. Then becauſe of the exquiſite Senſe of thoſe Parts, there happen ſo great Pains to the Children, that many who hitherto were very well, are now in great danger of their Lives, and often die, by reaſon of many miſchievous Accidents which happen to them at that time. *Hippocrates* names the principal of them in the 25th Aphoriſm of his Third Book: *In progreſſu vero quum jam dentire incipiunt, gingivarum prurigines, febres, convulſiones, alvi profluvia, & maximè quum caninos edunt dentes, & his præſertim pueris, qui craſſiſſimi ſunt, & alvos duras habent.* "When, ſays he, Chil-

* *Never before the Teeth are ready to ſtart forth.*

" dren begin to breed their Teeth, they are trou-
" bled with itching of their Gums, Fevers, Convul-
" ſions and Looſneſſes, and principally when they
" breed their Tusks, or Dog-Teeth, eſpecally thoſe
" Children who are fat (or full of Humours) and
" bound.

The Dog-Teeth, commonly call'd the *Eye-Teeth*, cauſe more Pain to the Child than any of the reſt; becauſe they have a very deep Root, and a ſmall Nerve more conſiderable, which, 'tis ſaid, hath communication with that which makes the Eye move. And as *Hippocrates* alſo ſaith, Thoſe Children which are very groſs and bound in their Body, are upon this account in much more danger than others; becauſe the Pains in theſe cauſe a much greater Fluxion of Humours upon the diſeas'd part, with which their Bodies always abound when they are coſtive. The Teeth which are firſt bred, are the Cutting, or Fore-Teeth; as well becauſe they are ſooner perfect, as becauſe, being ſmaller and ſharper, the Gums are eaſier pierc'd thro', and alſo with leſs Pain, than by the reſt, which are ſofter at the begining, and being larger, cannot ſo ſoon make their way, at leaſt not without greater Efforts.

Signs when Children will breed their Teeth, are: When the Gums and Cheeks are ſwell'd, they feel a great heat there, with an itching, which often makes them put their Fingers in their Mouths to rub them, from whence much Moiſture diſtils down into the Mouth, becauſe of the Pain they feel there. The Nurſe in giving them ſuck, finds the Mouth hotter, they are much chang'd, and cry every moment, and cannot ſleep, or but very little at that time; and one may feel and ſee ſmall Points of the Teeth thro' the Gums, which appear thin and pale on the top, and ſwell'd and red on the ſides. And if it happens that the Teeth are a long time e'er they are cut, or that too many of them cut at a time, there is great danger

ger the Children will fall into those Accidents mention'd by *Hippocrates* in the aforesaid Aphorism; and if it do not quickly cease, they'l die of it, as many do.

In this Case two things must be regarded; the first to preserve the Child from the evil Accidents that may happen to it, because of the great Pain; and the second, to assist as much as may be the cutting of the Teeth, when they can hardly cut the Gums themselves.

To prevent these Accidents to the Child, the Nurse must keep a good Diet, and use all things that may cool and temper her Milk, that the Fever may not follow the Pain of the Teeth: and to hinder that the Humours may not fall too abundantly upon the inflam'd Gums, keep the Child's Belly always loose, to empty them downward, to which purpose give him gentle Clysters, if he be bound; but there is often no need of them, because at that time they are usually troubled with a Looseness. [*Notwithstanding that, Clysters are very convenient in that Case.*]

As to the second, which helps the cutting of the Teeth, that the Nurse must do from time to time, who must pass her Finger upon the Child's Gums, gently rubbing them, that being thereby rarify'd, they may be the easier penetrated, and cut by the Teeth, which are ready to come forth; to which also the Child may it self be helpful, if they give it a little stick of Liquorish to champ, or a little end of a small new Wax-Candle, which is very good to soften the Gum. There is ordinarily made use of a Silver Coral, furnish'd with small Bells, to divert the Child from the Pain it then feels. Sometimes instead of Coral, they put a Wolf's Tooth in. One must not however believe that these things have any peculiar Property, as many Women imagine: but if they are helpful in this Case, it is because of their Solidity, Evenness and Smoothness; for the Child

rubbing the Gums with it, to ease the itching which it feels there, doth by degrees diminish the thickness of them, and so they are at length insensibly cut by the Teeth which are under. If these things do no good, because the Gums are either too hard, or too thick, that the Child may not suffer so much; nor, by reason of the great Pain, fall into those Accidents by us above-mention'd, let the Gums be cut with a Lancet, where the Teeth are ready. Nurses use to do it with their Nails, but 'tis better to be done with * a Lancet, because 'tis not so painful.

* *A thin smooth Groat is as good or better than either.*

There are many Remedies, which divers Persons assert have a particular Property to help the cutting of the Teeth, as rubbing them with Bitches Milk, † Hares or Pigs Brains, and hanging a Viper's Tooth about the Neck of the Child, and other such like Trifles; but since they are founded more on Superstition than any Reason, I will not trouble my self to enlarge upon what is so useless.

† *They may and do soften the Gums.*

CHAP. XXIX.

Of the Looseness of an Infant.

AS soon as little Infants are in the least indispos'd, they very ordinarily get a Looseness, to which their natural Moistness very much contributes, as is taught in the 53d Aphorism of the Second Book; *Quicunque alvos humidas habent, si quidem juvenes fuerint melius degunt his qui siccas habent*, &c. "They, "saith *Hippocrates*, who have a loose Belly in their "Youth, are in better health than those that are "bound." Besides, that all Children are of a moist Nature,

Nature, and usually, during their sucking, fed with Spoonmeats, which easily and readily flow from the Stomach and the Guts.

For the most part the Looseneſſes happen to them by reason of the great Pain they have at the cutting their Teeth; for all the Humours are so overheated, that they are then very thirsty, which makes them, endeavouring to extinguish it, draw more Milk than their weak Stomachs can digest, which corrupting there, a Looseneſs certainly follows. It may also happen by the vitiousneſs of the Nurse's Milk, which may be too hot (as a new-laid Woman's also is) being ever impure, especially the first five or six Days.

If the Looseneſs be not accompany'd with a Fever, or some other Accident, it is not dangerous, because it is an Indiſpoſition convenient to a Child's Nature and moist Habit, as also to the Food wherewith it is nourish'd. *Hippocrates* assures us as much, in the 34th Aphorism of his Second Book; *In morbis minus periclitantur, quorum naturæ, aut ætati, aut tempori morbus magis cognatus fuerit, quam quibus in nullo horum cognatus fuerit:* "They, says he, are in less danger, whose Maladies are more familiar and convenient to their Nature and Temperament, or their Age, Custom of Living, or the Season, than they whose Diseaſe hath no respect to any of these things." But however, if it continues too long, it will not be amiss to remedy it, lest the Child, compos'd of a tender and soft Substance (easy upon this account, if one may so say, to be melted) be not too much enfeebled by it, because of the great diſſipation of Spirits, which the continual Evacuation of Humours flowing thro' the Belly effects.

For this purpose let it suck well purify'd Milk, giving it but little at a time, to the end it may the better digest it; and to cleanse his Stomach and Guts of the ill Humours, which being contain'd in, and cleaving to them, will yet so much the more hinder

the

the digeſtion, give it a ſlight Infuſion of Rhubarb, or a little compound of Syrup of Succory: gentle Anodine Clyſters may likewiſe be given, made with Milk, Yolks of Eggs, and Honey of Violets; and after purging, let them be made with Plantane Water. One may then alſo mix the Yolk of an Egg in the Pap he eats; rub the Belly with Oil of Quinces, and lay upon his Stomach Compreſſes dipt in red Wine, wherein Province Roſes are boil'd; ever having reſpect above all to the Cauſe of the Looſeneſs, and the Accidents complicated with it, and uſing Remedies convenient to their Nature.

CHAP. XXX.

Of Vomitings in Children.

ONE need not wonder at the Vomiting of little Children, becauſe 'tis an Accident more ordinary and common to them than any other; nor need one be very careful to ſtop it, unleſs it be continual, and a little exceſſive; in which Caſe 'tis fit to remedy it, to prevent the Conſequence of a worſe Malady.

Vomiting uſually happens to Children, becauſe they often draw more Milk than their little Stomachs can eaſily contain or digeſt, with which being overcharg'd, they are oblig'd to caſt it up; it may alſo happen to them, becauſe 'tis bad Milk. The Efforts of a violent Cough may cauſe the ſame thing, which alſo may be effected by their Nurſes too rude dancing them in their Arms, ſhaking them too much by violent rocking their Cradle; foraſmuch as by thoſe Motions the Milk, being too much agitated and diſturb'd in the Stomach, cannot be well digeſted; but very often alſo, becauſe it cannot be well contain'd in it, the Infant's Belly being too much compreſs'd

preſs'd and ſwath'd with his Swathes and Blankets in which he is ſwadled, which makes him throw it up, becauſe of the Pain he feels. To all theſe Cauſes, the Sweetneſs and Lukewarmneſs of the Milk, wherewith the Infant is nouriſh'd, contributes much.

When the Vomiting is too frequent, 'tis fit it ſhould be ſtop'd, leſt by the Infant's continual rejection of the Nouriſhment, he becomes extremely weakned for want of Food; and poſſibly the Action of the Stomach ſo perverted, that it can hardly be re-eſtabliſh'd after that this Action is turn'd into a Habit.

To cure this Vomiting, regard muſt be had to that which cauſeth it: as when the Child ſucks more than it ſhould, the Nurſe muſt not give it ſo much, and but little at a time, that the Stomach may the eaſier contain and digeſt what it receives. If it be the ill quality of the Milk, the Nurſe muſt be chang'd for a better; if by a Cough, it muſt be help'd by things fit to appeaſe it, according to the different Cauſes wherewith it is excited. The Nurſe muſt not dance it ſo rudely, nor rock it ſo fiercely after it hath ſuck'd, that the Digeſtion of the Milk may not be hinder'd by theſe Agitations. Care muſt likewiſe be taken, that it be not too cloſe wrap'd and ſwath'd upon the Stomach, but that it may be freely extended according to the quantity of Milk receiv'd. And beſides all this, if any ill Humours be contain'd in it, it will be very convenient to purge the Infant with a gentle Infuſion of Rhubarb, or half an Ounce of compound Syrup of Succory: and after that it hath been thus purg'd, if judg'd to the purpoſe, it may take a little Syrup of Quinces to fortify the little Stomach; having alſo upon the Region of it for the ſame purpoſe, Compreſſes wet in red Wine, in which Province-Roſes, Cinamon and Cloves have been boil'd.

CHAP.

CHAP. XXXI.

Of a Hernia, *or Rupture in Children.*

TO the end we may not deviate too much from our Undertaking, which is only to obſerve ſome Particulars concerning Infants Maladies, we will not ſtay to explain, nor thorowly to treat of all the different kinds of *Hernia*'s, but be contented ſlightly to examine thoſe which uſually happen to them, as the Inteſtinal; ſometimes as compleat in Children as Men, as when the Inteſtine falls into the bottom of the *Scrotum*; at other times incompleat, when it doth not paſs the Groin. It may be likewiſe ſometimes, tho' rarely, the * *Epiploon*, which makes the Rupture, and falls down alone as the Inteſtine doth; and ſometimes both the one and the other are there found together.

* *The Cawl.*

The moſt frequent Cauſe of Ruptures in little Children are their fierce Cries and violent Coughs, to which the Moiſtneſs and Softneſs of their Bodies doth not a little contribute; and alſo when they are too ſtraitly ſwath'd, becauſe their Belly (not being able to be ſufficiently enlarg'd, when they cry or cough much) is ſtrongly forc'd downwards, by reaſon of which theſe *Hernia*'s, or Ruptures, are eaſily made.

This Miſchief muſt be remedy'd as ſoon as diſcover'd; for the longer it is neglected, the harder it is to be cur'd: becauſe by the continual falling of the Inteſtine, the Place thro' which it falls is every day more and more dilated. But as *Hernia*'s eaſier happen to Children, becauſe of the Tenderneſs of their Bodies, ſo likewiſe are they ſooner cur'd than in antient Perſons, becauſe the Parts dilated are eaſier reunited, as well by reaſon of their Tenderneſs, as that the Inteſtine (being reduc'd and contain'd in its natural

natural place whilſt the Child is growing) is enlarg'd in proportion to all the other Parts of the Body; and the Place dilated leſſens by little and little, and cloſeth by the compreſſion of the Truſs or Swathe rightly apply'd upon it.

Whilſt Children are in Swadling-Clouts, the cure of true Ruptures, which happen to them, muſt not be undertaken, but by a Swathe-Band, which alone is capable to cure both the perfect and imperfect: and is effected by a Roller, putting a Compreſs or Truſs juſt upon the Rupture, after having firſt reduc'd into their natural Situation the Inteſtine and *Epiploon* likewiſe, if it were fallen down. To do this, you muſt lay the Child with the Head low, then with both Hands reduce it by degrees; and thruſting with one the Tumour very gently, and cauſing with the other the Inteſtine to re-enter, juſt at the Dilatation, and keeping in with it that which re-entred, to hinder its coming forth again; continuing to do thus, until the Reduction be compleated. After which one muſt lay a Compreſs or Truſs thick enough upon the dilated Place, then ſwathe it on this manner: Take a Roller of Breadth and Length proportionable to the bigneſs of the Child, ſo that it go three or four times about; lay then the firſt end upon the Child's Belly, towards the Side oppoſite to that where the *Hernia* is, afterwards guide it under the Buttock, then conduct it in, bring it upwards over the applicated Compreſs; bring it thence under the Reins, on the ſame Side quite round the Body; afterwards paſs it as at firſt, continuing to do ſo till you come to the end of it: ever obſerving, that the Circumvolutions which paſs over the Groin, be brought from below upwards, to keep it the better up, and to faſten them all with ſmall Pins on the top of the Compreſs, that ſo the Swathing may be more firm.

It will be very convenient that the Nurſe carry the little Infant to a Chirurgeon, to learn the manner

ner of reducing the Rupture, and exactly uſing the Swathe; inſtead of which a ſmall Truſs may be had, which will be yet better for this purpoſe, becauſe there is not ſo much trouble in removing and undoing it ſo often as there is in a Swathe: for which purpoſe it ought to be wax'd, or oil'd on each ſide, that the Child's Excrements may not rot it. Now if one would have theſe Swathes or Truſſes ſpeedily to cure the Rupture, 'tis very fit the Child ſhould keep its Bed, at leaſt forty days or more, according to the bigneſs of the Dilatation: Let care be taken to prevent its Crying and Coughing as much as may be, and that the Belly be not ſwath'd too ſtrait, leſt thoſe things do again force the Inteſtine to come forth. Some before they apply the Swathe, foment the part with Smith's Water, and then lay the Plaiſter of *contra Rupturam* upon it; but this is not neceſſary, when a Truſs or Swathe may be ſufficient, provided it be well apply'd.

Beſides theſe true *Hernia*'s, of which we have juſt ſpoken, there may be alſo falſe ones, wherein no part falls down, but only there is a diſtention of the Membranes of the *Scrotum* and Teſticles, caus'd by ſome Matter there collected, as well thro' the natural Weakneſs of thoſe Parts, as with being bruis'd and preſs'd in a bad Labour, amongſt which the watry and windy happen oftneſt: for as for the fleſhy and varicoſe, they happen never, or but very rarely in little Infants.

For the Cure of the Watry, call'd *Hydrocele*, which is caus'd by Waters contain'd in the common or proper Membranes of the Teſticles, apply to the ſwelling Remedies that may reſolve and dry up the Waters therein, and diſſipate the Wind, and afterwards fortify the Parts. They may be reſolv'd with Fomentations of the Decoction of Camomile, Melilot, Rue, Marjoram, and Fennel, in which alſo the Compreſſes to lay upon them may be dipt: they may be dry'd with

with Lime-Water, wherein a little Allum is diſſolv'd; and after that the greateſt part of the Waters are reſolv'd and dry'd away, let the Parts be fortify'd, leſt others be there ingendred, by putting to it Compreſſes wet in red Wine, wherein Roſes and Allum have been boil'd, ever having reſpect to the Cauſe of the *Hydrocele*, and that which feeds it. But if theſe Remedies prove in vain, the Tumor muſt be open'd, to evacuate the Waters by a ſingle Prick of a Lancet; with which one muſt be ſatisfy'd in little Infants, who for the Weakneſs of their Age, Tenderneſs of their Bodies, and want of the uſe of their Reaſon, cannot then undergo a greater Operation for the Cure of an *Hydrocele*.

CHAP. XXXII.

Of the Scabs which are upon the Head and Face of young Children.

WE intend to treat here only of ſuch Scabs as have no malignity, and are only caus'd by the Superfluity of ſome Humours, which by being ſimply overheated, are eaſily convey'd to the Head and Face, where they make little Pimples; in which theſe Humours continuing, are corrupted and converted into Matter, which after eats thro' and ulcerates the ſimple Superficies of the Skin, and drying round about the place where it came out, makes thoſe Cruſts there, uſually call'd Scabs, with which ſome Childrens Heads and Faces are every where ſo cover'd, that they ſeem to have a Cap and a Mask of one piece; for which nothing can be ſeen, but only the Eyes and Edges of the Lips, which are exempt from it.

Many Perſons will have theſe Scabs, as well as the Meazels and Small-Pox, to proceed for the moſt part

part from some Superfluity and Residue of the menstruous Blood, from which the Infant purgeth it self after it is born: which because it cannot be well rectify'd, is so driven out that it may be cast off as useless: but it is often from the ill Nourishment of the Children, who sometimes suck more Milk than they can digest, as also from the ill quality of it, whence is engendred a quantity of viscous and corrupt Humours, causing these Scabs, which come most upon the Head and Face, because they are moister, especially in Children, than any other part of the Body.

These Scabs may be known not to be malignant, when they are superficial, moist and yellowish, and when the Scabs being taken off, the Skin appears red and crimson, without being deeply ulcerated.

The Course of these Humours must by no means be hindred, by driving them inwards, because their Evacuation defends little Infants from many ill Diseases; and we ordinarily see them, whose Bodies have a long time purg'd away such Superfluities, to be in better health after they have cast forth all this kind of Corruption. And as *Guido* saith very well, Tho' to the Sight these Scabs are ill, yet in respect of their Cause they may be very good; because Nature is thus accustom'd to purge the Infants Bodies in thrusting out these Excrements; but Endeavours must only be us'd to hinder the generation of more of these ill Humours in the Child: wherefore a healthful Nurse must be provided for it, whose Milk is perfectly purify'd, and very cool; the Child's Belly must ever be kept open, and purg'd, if necessary, with a little Syrup of Roses of Succory, that so the Humours may not be sent in too great abundance to the Head, nor the *Sanies* under the Scabs may not, eating and corroding the Skin, cause deep Ulcers. It will not be amiss also to make the Scabs fall off, that there may be a freer vent or issue, for which fresh Butter is ordinarily

narily made uſe of, rubbing them therewith to moiſten them, or with the Liniment of Oil of ſweet Almonds, laying afterwards a Cabbage or Beet-leaf upon it; changing them twice or thrice in a Day, to avoid the Offence and Corruption of the Moiſture, which theſe things draw forth.

Theſe things ought to be continu'd till the Child be perfectly cur'd, and no other, becauſe they do very much ſuppurate the Scabs; and only draw away the ſuperfluous Humours, which ſhould in no wiſe be retain'd within, for fear leſt a worſe Malady happen after the Evacuation, of which the Places will dry, and heal of themſelves. All this while the Child's Hands muſt be pinn'd down, leſt the rubbing and ſcratching the Scabs when they itch, ſhould by irritating theſe Parts cauſe an Inflammation, whereby a yet greater Abundance of Humours will flow thither.

CHAP. XXXIII.

Of the Small Pox and Meazles in Infants.

THE Small Pox is a contagious Diſeaſe to little Infants; which ſometimes alſo happens, tho' more rarely, to Perſons already advanc'd in Age, in which abundance of Puſtules all alike do break forth throughout the Superficies of the Skin, engender'd from the Impurity of the Blood, and other Humours which Nature there caſts out, as an univerſal Emunctory to cleanſe the whole Body of them.

Many Antient as well as Modern Phyſicians attribute the Cauſe of this Diſeaſe to the Reſidue of the menſtruous Blood, wherewith the Infant was nouriſh'd in the Mother's Womb; which after its Birth coming to be heated, and to boil in the Veſſels, is ſeparated from the whole Maſs of Blood, which hath been

been since engender'd, and is spread throughout all the Superficies of the Body, to be in that manner rejected and expell'd. This Reasoning (according to my Opinion) is not very probable: for we daily see many Men and Women, who, tho' very aged, have never had this Malady, which they could never have avoided, if it proceeded from the Remainder of the menstruous Blood, wherewith every one, without exception, is nourish'd in their Mother's Womb. They who maintain this Opinion, reply, that tho' some Persons be exempted from this Disease, 'tis because their strong and robust Nature could digest and consume those Superfluities, or else purge them off by other Ways, as by a Looseness, or in some manner more insensible. However, they must confess and agree, that this menstruous Blood (if it were that) could not remain hid and quiet in the Body for 30, 40, or 50 Years after Birth, without producing its Effects, as we see in several that have not this Disease till those Years. But 'tis much more credible, that the Cause of the Small Pox is the Corruption of a contagious Air, which doth principally infect and spoil the Blood of Infants and Youth, who are more dispos'd to it than they that are further advanc'd in Years, because of the Tenderness and Softness of their Bodies; and more at certain Years, and some Seasons, than at others, as it may easily be perceiv'd every day; for in pestilential Times, the Small Pox is much more common in the Spring and Summer, than at the End of Autumn, or in Winter.

The Small Pox doth * differ from the Meazles, tho' they are so like in the beginning, that often it is difficult to distinguish them one from the other, till after the second or third Day, when the Small Pox, which at first appear'd like the Meazles, begins to arise into Pustules, and to whiten. The Meazles are caus'd of a Blood bilious and over-heated, which only makes red Spots throughout the Skin, with-

* *Hardly in Kinds, only in Degree.*

without or with but very little Elevation, which comes ſooneſt and principally on the Face: but the Small Pox proceeds from a ſanguine and pituitous Matter, which being more thick and viſcous, produces many Puſtules riſing high, and by degrees growing white and ripening; after which their Matter drying away, they are converted into Scabs.

Of the Signs of the Small Pox, ſome precede, and others accompany them; they that precede, are, a Fever, Sottiſhneſs, Dizzineſs and Pain in the Head, very troubled † Urine, Wearineſs and Pains in the Reins and Loins, Reachings and Vomitings, Difficulty of Breathing, frequent Yawnings, Sneezing, Itching of the Noſe, Redneſs of the Eyes, and univerſal Wearineſs all over the Body. But when the Small Pox begins to come forth, there appear, about the third or fourth Day, many Pimples riſing every where, which grow and augment as well in Bigneſs as Number, till the eighth or ninth Day, during which Time they ripen and whiten by degrees; the Head and Face ſwell, the Eyes are clos'd by a great Flux of Humours thither, the Noſe is ſtop'd with Excrements, which there dry; the Patient is troubl'd with a hoarſe Voice, a dry Cough, ſore Throat, and great Difficulty to breathe; and then all the Parts of the Body are ſo ſwell'd thro' the Abundance of Pimples, that it appears blown up and monſtrous.

† *Commonly whitiſh, like that of Horſes.*

There may be two Kinds of Small Pox, according as it is more or leſs malignant; the firſt is that which is accompany'd with but a ſimple Emotion of a Fever, only ſtir'd up by an Ebullition of Blood and Humours, ſoon ceaſing from the Beginning, without any evil Accident, which ripens, ſuppurates, and is eaſily and ſpeedily cur'd. The Puſtules of theſe do riſe full, and the Matter is white, ſmooth, and well-concocted; and the Infants eaſily eſcape it, if they are but well tended.

But the other * ſort of Small Pox, totally malignant, is that which is caus'd from ſome contagious and peſtilential Humour; where the Puſtules are flat, brown, obſcure or livid, having ſmall black Spots in their middle: They come forth but ſlowly, and no Suppuration follows, or 'tis very bad, ſanious, and watry, accompany'd with pernicious Accidents, as a malignant Fever, Phrenzy, great Difficulty of Breathing, Faintneſs, Dyſentery, and others, which often are mortal; or at leaſt malignant Ulcers, Foulneſs of the Bone, Loſs of Sight, disfiguring and great Deformity of the Face, or Lameneſs of ſome Member, according to the Places where theſe vitious Humours are convey'd and retain'd. Theſe Havocks are caus'd by that which all Women call uſually the Maſter-pock, which is nothing elſe but many Pimples, by their Nearneſs and Bigneſs joining together, and mixing their Matter; which being thus in great Quantity amaſs'd into one Place, gnaws and corrodes the Part deeper, than if they were ſpread and diſpers'd in many diſtinct Puſtules; for which Cauſe its Cavity remains much more hollow and deform'd, by reaſon of the great Loſs of Subſtance there uſually made; and depoſiting and tranſporting this acrimonious Matter upon the Bones or other Parts, it fouls them, or cauſes other Accidents, as we have recited.

* *They have both the ſame Cauſe.*

The Prognoſtick is drawn from the different Nature, which we have now explicated: for if the Fever be ſmall, and that it ceaſes proportionably to the coming forth of the Pimples, if they be not in too great quantity, and that they ripen and whiten ſpeedily, it is a good Sign; but if the Fever be violent in the Beginning, and augments every Day, with Difficulty of Breathing, and other Accidents, according as the Pimples come forth; if they are in great number, black, flat, dry, and without Suppuration, it is a Sign of Death.

Death. Beſides, Infants are not in ſo great danger as elder Perſons, in as much as this Diſeaſe is more agreeable to their Age and Nature, and that they alſo have a thinner and ſofter Skin, thro' which this Matter is eaſier expell'd, than thro' theirs that is harder, and whoſe Pores are leſs open.

As to the Meazles, they are never ſo dangerous as the Small Pox, becauſe its Matter being more ſubtile, is much eaſier and ſooner evaporated; which uſually terminates in three or four Days, at the End of which ſometimes follows the Small Pox: which often makes ſome, as we have ſaid, take them one for another in the Beginning, at which Time they appear almoſt the ſame.

The Cure of the Small Pox particularly conſiſts in the Force and Virtue of Nature, that endeavours to expel theſe malignant Humours; wherefore it muſt be aſſiſted to overcome them as much as may be, and fortify'd, that it may be able to finiſh the Work it hath undertaken, being very careful not to divert it from its Operation, by an untimely Bleeding, or a Medicine unſeaſonably given. To remedy this Malady, keep the Child to a good Diet, avoiding ſolid Meats all the time, giving it only Spoon-meats, as Broths made with Veal and Fowl, or a little of a good Jelly; let his Drink be *Ptyſan*, made with cleans'd * *French* Barly, the Roots of Dogs-graſs and Liquoriſh, and a few Raiſins of the Sun. If it be a ſucking Infant, he muſt have no Pap till he be perfectly cur'd; and ſince then by reaſon of his Age he cannot receive Remedies often enough, nor other Food at the Mouth than Nurſes Milk, let her obſerve a good Diet her ſelf, to refreſh and temper her Milk, as much as may be; let her not carry the Child into the Air, but keep it in a cloſe Room, neither too hot nor too cold: for too hot

* *Beware of too great Coolers, as much as of thoſe things that cauſe too much Heat.*

Air weakens it extremely, by greatly resolving and dissipating the Spirits; and a too cold Air drives the Humours back into the Body, and hinders the coming forth of the Small Pox. Some advise it to be kept in a Bed hung round with red Curtains, because this Colour doth ordinarily move the Humours from the Center outwards: but this often hurts the Eyes, and inflames them by its Rays; to which also in this Disease there happens a great Flux: wherefore I believe a softer * Colour, whatever it be, ought to be preferr'd; but Custom will have it so. The Infant's Sleep must be moderate, that the Humours being thereby better concocted and digested, the coming forth of the Pustules may be the freer; it ought not to be to a Stupidity, for that would be a Sign Nature were oppress't. Let the Belly be kept moderately open with gentle Clysters, that the Excrements may be thence evacuated, if too long retain'd.

* *Green the best of Colours.*

But when the Small Pox is in the Beginning accompany'd with a great Fever, Difficulty of Breathing, and other Accidents, the principal Remedy is Bleeding; altho' most Women not understanding the Case, do condemn it, and will not suffer it to be done to their Children, imagining that it would hinder the coming forth of the Small Pox: and if it happens that the Child after Bleeding die, altho' it be thro' the Greatness and Malignity of the Disease, they will not fail to impute it to Bleeding. But it is very certain this is a profitable Remedy in the Beginning of this Disease; for by this Means all the Humours are cool'd, and the Fulness of them being evacuated, Nature easily commands and overcomes the rest. As to purging, it ought not to be us'd in the Beginning, lest by the Agitation it makes in the Humours, Nature be hinder'd and diverted from doing its Work; but towards the End it will be very convenient to empty the remaining Impuri-

Impurities, leſt theſe Relicks falling upon ſome Parts, ſhould ſpoil them.

All this while ſuch things muſt be us'd, as may fortify the Heart; as Cordials, not of the ſort of thoſe pretended Cordial and Treacle Waters, which ordinarily are made uſe of, and rather cauſe one to vomit, than fortify the Heart; nor thoſe Pouders of Pearl and *Bezoar*, and other ſuch like Trifles, which many ſuperſtitiouſly believe, without any Reaſon, to have a ſpecifick Quality to this purpoſe. But the truer and more ſalutary Cordials are, the breathing of ſweet and clear Air, and wholeſome Diet, with the moderate Uſe of things agreeable to the Stomach, and which pleaſe and comfort it; ſuch as Syrup of Lemmons and Pomegranats mix'd with the Child's * *Ptyſan*; or a little Wine well allay'd with Water, which is the Cordial of Cordials: if the Fever be not great, and that it is a ſucking Child, the Nurſe's Milk ought to be ſufficient for all.

* *A* Frenchman's Ptyſan *muſt be extoll'd before the beſt and moſt approved* Specificks.

As to outward Remedies, or Application to the Puſtules, 'tis beſt to leave it to Nature, only aſſiſting it as we have ſaid. And to the end they may ripen eaſier, as ſoon as they begin to appear, which is about the third or fourth Day, anoint them, principally thoſe of the Face, with Oil of Sweet Almonds, rubbing them with a Feather dipt in it: ſome mix a little Cream with it, others uſe only a little freſh Butter, and others again old Hogs-greaſe melted, and often waſh'd in Roſe-water, and well beaten in a marble Mortar, with which they anoint them till they are perfectly heal'd: and when the Puſtules are ripe enough, which is known by the Whiteneſs and Itching that follows, and is uſually about the ninth Day, the biggeſt of them may then be pierc'd to empty the Matter, leſt by its too long Stay there it ulcerates and corrodes the Parts too deeply.

deeply. This may be done with a Gold or Silver Needle, or by cutting off the Tops with Sciffers: afterwards to dry them up, anoint the Face with a Liniment made with fresh Cream mixed with white Chalk, continuing this Remedy till the Scabs be quite fallen off, using it Nights and Mornings; or else with Ointment of Roses mix'd with a little fine pouder'd Ceruse.

To hinder the Small Pox from causing too great a Flux of Humours upon the Eyes, 'tis good using from the Beginning some cooling Remedies, that, by moderate driving back, may hinder it. There is ordinarily us'd Rose-water, and Plantane-water mix'd together, with which they bathe them from time to time: most Women steep a little Saffron in it; but because of its strong Scent, I chuse rather the Waters alone. The Nurse's Milk is likewise very good to appease the Pain. Care must also be taken, from time to time, to unstop the Infant's Nostrils, that he may breathe the freer, which may be done with small Linen Tents; and to help the Throat, which is always hoarse, a little Syrup of Violets mix'd with his *Ptysan*, may be us'd; and to cut the Phlegm that sticks there, give it a little Syrup of Lemmons or Pomegranats, or a Gargarism of Vinegar and Water: but the Milk only is sufficient for sucking Children. Let us now see how a sucking Child must be govern'd in the *French Pox*.

CHAP.

CHAP. XXXIV.

How to cure the Venereal Lues *in Infants.*

IF the Small Pox, of which we have lately discours'd, be a contagious Malady, it is not so ordinarily * but in respect to Infants, for it is hardly communicated by Frequentation to elder Persons; but it is not the same in the Great Pox, the Venom of which is so pernicious and susceptible, that a single Child that hath this Disease is capable to † communicate it, as it hath been very often seen, to whole Families, and as well to Old as Young. 'Tis a sad thing to see poor small sucking Innocents afflicted with so ill a Disease; which, besides that it makes them suffer the Pain of a Sin of which they are innocent, makes them also very often be abandon'd by every one, and deserted in this deplorable State by their own Mother her self.

* *'Tis sufficiently known, that the Small Pox is contagious to Young and Old, according as each Body is prepar'd for Infection.*

† *Seldom to any but whom they suck.*

Those that have this Disease so young, either bring it with them into the World from their Mother's Womb, which may be known, if she were infected with it; or if it had at its Birth Pustules and Ulcers in divers Parts of its Body, and principally about the Belly, towards the Fundament, and on the Inside of the Thighs, as also on the Head; or else they got it since, and took it from their Nurse, who is in like manner infected with it: then the first Impressions will appear about the Mouth of the Child, where Ulcers will breed, because of the Acrimony of the ill Milk it sucks, which being its Nourishment, will not fail to communicate its Venom to all the Parts of the Body.

'Tis

'Tis very hard to cure Children that are born with this Diſeaſe, for they very ſoon die after; becauſe their whole Subſtance cannot be re-eſtabliſh'd, having for its Foundation had ſo bad a Principle, as the Mother's Blood infected with ſuch a Venom, wherewith they have been engender'd, form'd and nouriſh'd. But as to thoſe who have receiv'd it from their Nurſes only, there is much more Hope of, and leſs Difficulty in their Cure; becauſe the Venom of the bad Milk not communicating it ſelf immediately with its whole Subſtance to the Veſſels of the Infant's Body, doth not there make ſo great a Spoil as in the other, where the Blood, with which it is only nouriſh'd whilſt it is in the Mother's Womb, is convey'd to him, and ſpreads, ſuch as it is, throughout all the Parts of its Body; for then there is only the pureſt of this pocky Milk, or to ſay better, the leſs impure, which (being chang'd into Chyle in the Stomach, and purg'd by the Inteſtines of the greateſt part of its Excrements) can, by mixing afterwards with the Maſs of Blood, alter and corrupt it by the ill Quality that always remains in it, notwithſtanding the different Preparations it hath receiv'd. However, the Child infected by the Nurſe can never be cur'd, ſo long as ſhe ſucks it, foraſmuch as her Milk is ever infected with that Corruption and Venom; and the worſt is, that changing her for another, as one is oblig'd to do to cure it, 'tis a very great Hazard if it doth not communicate this contagious Malady to the new one.

It may be ſaid in general, that the Cure of the Great Pox is very difficult in little ſucking Children; for, by reaſon of the Feebleneſs of their Age, they cannot then either take or ſupport, without great Danger of their Life, the Violence of Remedies convenient for it; wherefore it were to be wiſh'd, that by a palliative Cure one might delay a compleat one, until they be three or four Years old: but ſince there are very many who

who would periſh before they were ſo much as a Year or two old, becauſe this filthy Diſeaſe doth ever increaſe, and the Symptoms of it do much eaſier make Impreſſions upon their Bodies, becauſe of the Delicacy and Tenderneſs of them, than upon ſuch who are more advanc'd in Years; therefore one is oblig'd ſometimes to undertake the Cure, tho' the Child be yet ſucking. This Enterprize is then in truth very perillous; but one is conſtrain'd to reſolve on it, when there is no Appearance or Hope, that the Child can otherways eſcape. Wherefore the Means follow.

Firſt, therefore, change the Nurſe, if ſhe be infected, for one whoſe Milk is well purify'd; and if it be not ſo, let her be blooded and purg'd, as the Caſe requires. Moſt would have her, during the whole Courſe (that her Milk may be very phyſical) uſe a Treacle-Water, and a Sudorifick Decoction: but beſides that I think theſe things will be very ineffectual, I fear, leſt by heating her Milk, it may prejudice inſtead of profit the Child; and I ſhould adviſe her rather to keep a temperate and cooling Diet; and that ſhe may not her ſelf receive any Hurt, it will not be amiſs for her to waſh her Nipple with Wine every time ſhe gives the Child ſuck; and that ſhe now and then take a Purge, to keep her Body clean, and leſs diſpos'd to receive this Infection.

But very often theſe poor little Children, thus afflicted, are ſo unhappy, that they cannot find any Nurſe that will, by giving them ſuck, expoſe themſelves to the hazard of getting the Diſeaſe. In this Caſe we muſt chuſe one that hath abundance of Milk, and is ſoft milch'd, to the end that by gentle ſqueezing of it, there may fall enough into the Infant's Mouth for its Nouriſhment; or that by having milk'd ſome in a Glaſs, they may feed it with a Spoon; or elſe they may dip a Piece of Linen roll'd up in it, and give it to ſuck. But the beſt way to avoid the Child's ſpoiling any Nurſe, and to exempt it from ſuch a Subjecti-

on,

on, is to let it ſuck a young Goat, fed on purpoſe with good Hay and other convenient things, that ſo the Milk of it may be very good.

As to the Child, it is moſt certain it can never be cur'd of a confirm'd Pox, but by the Uſe of Medicines wherein Mercury is mix'd, which hitherto is eſteem'd the proper Antidote to the Poiſon of this Diſeaſe: wherefore after bleeding and purging him with Syrup of Roſes, or of Succory, let him, if his Strength permit, be a little anointed with a Mercurial Ointment, wherewith only the Puſtules and Ulcers muſt be rub'd; in doing which by degrees, reiterating the Unctions, a ſmall Flux will be rais'd, which muſt be almoſt inſenſible, leſt the Humours being ſtir'd and convey'd in too great abundance to the Mouth, cauſe it to ſwell too much, and breed there naughty Ulcers, which may hinder the ſucking of it. Wherefore but a ſmall Quantity of Mercury muſt be mix'd with the Ointment, being better to be a longer time in curing, than to precipitate: for this cauſe having us'd a ſmall Friction or two at the moſt, forbear five or ſix Days, obſerving to what degree the Infant will be mov'd with it; and then by the Effects of the firſt, you may judge whether it is neceſſary to reiterate them, and with what Doſe, which can never be preciſely directed; becauſe all the Habits of Infants are as well different as thoſe of Men, amongſt whom ſome will ſpit ſooner with one Friction, than others with ſix immediately after one another. But in this Caſe there is nothing near ſo great danger of hurting by too little, as there is by too much: it being more eaſy to repeat and augment the Doſe, when not ſtrong enough at firſt, than to ſtop the Effects when it exceeds.

One may, inſtead of Frictions, or together with them, wrap the Infant in a Bed lightly perfum'd with Mercury; and as to the Ulcers which breed in the Mouth, let the Nurſe waſh them with Barley-Water boil'd with Agrimony, adding to it a little Honey of Roſes,

Roſes, or Syrup of Wormwood with White-Wine, wherewith alſo the Nurſe may often wipe off the Froth which is uſually there gather'd; which, that he may void the eaſier, let him lie upon his Side, and not upon his Back, leſt the Slime falling into the Stomach, or upon the Lungs, ſhould choak it. Let him always be kept warm, without carrying him to the Air, watching diligently the effect of the Remedy, which in this Caſe ought to be manag'd by a prudent and expert Chirurgeon, and not left to the Diſcretion of every one.

The common Way to make this Ointment, is to take half an Ounce of Mercury, which muſt be well cleans'd from its Filth, by paſſing ſeveral times thro' a double Linen; afterwards beat it well in a Mortar with four Ounces of Hogs-Greeſe, ſo much and ſo long till it is wholly incorporated: which being done, take two Drams of this Ointment for each Friction, more or leſs, according as the Infant appears to be ſtrong and diſpos'd to be mov'd by it, of whom chiefly the Puſtules and Ulcers muſt be anointed, as we have ſaid. *Pigray* affirms, that he hath ſeen Infants cur'd by being rub'd with Hogs-Greeſe, only ſtampt in a leaden Mortar; but it is ever by reaſon of the Mercury, from whence the Lead derives all its Quality.

CHAP.

CHAP. XXXV.

How to hinder Childrens growing Squint-ey'd, Awry, Crooked, or Lame.

THE Bodies of little Children, by reason of their Tenderness, are like soft Wax, or young Trees, to which 'tis easy to give such a Figure, as is in the Beginning desir'd: wherefore one must be then very careful that the good Conformation of their small Members be not vitiated for want of prudent Conduct; or else being so, they may be by a diligent Care reduc'd to their natural State. Now, amongst other things, endeavour to prevent the Child's squinting, growing awry, crooked or lame, and to redress any of these whatsoever, as much as possible.

To prevent its Squinting, chuse a Nurse whose Sight is stable and right, lest by her ill Example he gets an ill Habit; and, as we have said elsewhere, let the Cradle be ever so plac'd, that being laid in it, he may always see the Light directly before him, either of Day, Candle, or Fire; lest by being on one side, he come to turn continually his Eyes that way, whereby he will be in great danger of growing asquint. *Paulus Æginetus*, and *Pareus* also, would have a squint-ey'd Infant's Sight redress'd, by putting a Mask upon his Face, with only two small Holes right against the Eyes to see thro'; which will cause him, perceiving no Light but thro' those Holes, to hold his Eyes ever that way, by means whereof they will be establish'd in a right Situation, and by degrees quit the ill Habit they had gotten of looking aside. This Counsel seems good in appearance, but I believe it will be very inconvenient for a Child to follow it: besides, that the least removing of the Mask, on which side soever, the little Holes not corresponding perfectly in a direct

Line

Line to the middle of the Eyes, the Sight will be thereby more perverted.

To prevent a Child's growing Crooked, Awry, or Lame, the Nurſe muſt ſwaddle its Body in a ſtrait Situation, equally extending the Arms and Legs, and ſwathing the Child ſometimes one way, ſometimes another; leſt ſwadling it always one way, the Parts ſhould take an ill Habit. When he is laid in the Cradle, he muſt not be ſtrait on his Back, and not bending; and above all, when the Nurſe holds him in her Arms, let her carry him ſometimes upon one, and ſometimes upon the other; for holding the Child's Legs always on the ſame faſhion, it would be a great hazard if they did not at length grow crooked: and it is often the only reaſon, that ſo many Children have crooked Legs, eſpecially about the Knees. And this few Nurſes take notice of, which notwithſtanding is of great Conſequence.

When theſe Parts have an evil Conformation in their Figure, they muſt be helpt with Swathes and Bolſters conveniently plac'd, to keep the Parts in a good Poſture whilſt the Child is in Swadling-Clothes: afterwards, being grown a little bigger, one may uſe little Leather-Boots, ſomewhat ſtiff, with which the Legs muſt be ſtraiten'd; and if the Foot be only awry, Shoes underlaid of one ſide higher than the other, will ſerve the turn. When the Breaſt or Back-bone are in fault, it muſt be help'd, if poſſible, or at leaſt hinder'd from growing worſe; and the Fault may be hid, by ordering the Child's Clothes with Paſtboard, Whalebone, and Tin, plac'd where the Chirurgeon ſhall think fit, to reduce the miſhapen Part to a better Figure.

Having hitherto mention'd the moſt ordinary Diſeaſes befalling little Infants, 'tis not neceſſary here to make a larger Deſcription of them; for as for thoſe that we have not treated of, ſince they may indifferently happen to all ſorts of Ages, they have nothing pecu-

peculiar in reſpect of Children, as to the Knowledge or Cure of them, but only for the Tenderneſs and Delicacy of their Body.

There now remains only, to finiſh our Undertaking, that we give neceſſary Directions in the Choice of a good Nurſe.

CHAP. XXXVI.

Of the requiſite and neceſſary Conditions in the Choice of a good Nurſe.

THE firſt and principal of all the Qualities in a good Nurſe is, that ſhe be the own Mother of a Child, as well becauſe of the mutual Agreement of their Tempers, as that having much more Love for it, ſhe will be much more careful than an hir'd Nurſe, who ordinarily loves her Nurſe-Child but with a feign'd and ſeeming Love, having no other End or Foundation, but the Hope of the Recompence ſhe expects for her Pains by a mercenary Hire: Wherefore the true Mother, tho' not the beſt Nurſe, ſhould ever be preferr'd before a Stranger. But becauſe there are ſeveral that either will not, or cannot ſuckle their own Children, whether it be to preſerve their Beauty, as all Perſons of Quality, and moſt of the Citizens do; or that their Husbands will not ſuffer them, nor be troubled with ſuch a Noiſe; or that being ill or indiſpos'd, they cannot; there is then an Obligation to provide another Nurſe, which ſhould be choſen as convenient for the Child as may be.

Now even as we ſee Trees, tho' of the ſame kind, and growing in the ſame Place, being afterwards tranſplanted into another Soil, produce Fruits of a different Taſte, by reaſon of the Nouriſhment they draw

draw thence: even ſo the Health of Children, and ſometimes their Manners, depends on the Nouriſhment they receive at the beginning: for as to the Health of the Body, 'tis well known it anſwers the Humours that all the Parts are nouriſh'd and maintain'd with, which Humours ever retain the Nature of the Food whereof they are engendred. As for the Manners, they ordinarily follow the Temperament, which alſo proceeds from the Quality of the Humours, and the Humours from the Food. By this Conſequence, as the Nurſe is, ſo will the Child be, by means of the Nouriſhment which it draweth from her; and in ſucking her, it will draw in both the Vices of her Body and Mind. This appears very eaſily in Animals that ſuck a ſtrange Dam, for they always partake ſomething of the Creature they ſuck; being accordingly either of a mild or fiercer Nature, or of a ſtronger or weaker Body; which may be noted in the Example of young Lions, tam'd by ſucking a domeſtick Animal, as a Cow, Aſs, or Goat: and on the contrary, a Dog will become more furious or fierce, if it ſucks a Wolf.

The neceſſary Conditions in a good Nurſe, are uſually taken from her Age, the Time and Manner of her Labour, the good Conſtitution of all the Parts of her Body, and particularly of her Breaſts, from the Nature of her Milk, and in fine, from her good Manners.

As to her Age, the moſt convenient is from twenty five to thirty five Years of Age, becauſe that during this Space the Woman is moſt healthy, ſtrong, and vigorous. She is not fit before twenty five, becauſe her Body not having yet acquir'd all its Dimenſions, cannot be ſo robuſt; nor after thirty five, becauſe not having Blood enough in ſo great abundance, ſhe cannot have Milk enough for the Nouriſhment of the Child. However ſome Women are indifferent good Nurſes from twenty to forty, but very rarely before or after.

As to the Time and Manner of her Labour, it must be at least a Month or six Weeks after it, that so her Milk may be thorowly purify'd; because at that time her Body is usually cleans'd of the *Lochia*, which follows Labour, and the Humours are no longer disturb'd with it; nor must it be above five or six Months, that so she may be able to make an end of nursing the Child, that there may be no necessity to change her afterwards for another: She must not have miscarry'd, but have been brought to Bed at her full Time, of a healthful Son*, for 'tis a Mark of a good Constitution; and it must be her second or third Child, that she may, by Experience, know the better how to tend her Nursery.

* *May not a Daughter serve the turn?*

As to the healthful Constitution of her Body, 'tis the principal thing, and on which almost all the rest depends. In general, she must be very healthful, and of a good Habit, not subject to any Distemper; that she come of Parents that never had the Stone in the Reins or Bladder, not subject to the Gout, King's-Evil, Falling-Sickness, or any other hereditary Disease; that she hath no Spot, nor the least Suspicion of any Venereal Distemper; that she have no Scab, Itch, Scald, or other Filth of the like nature; that she be strong, the better to watch and tend the Child in all things necessary for it; that she be of a middle Stature, neither too tall nor too low, too fat nor too lean; because a Person of such a natural Symmetry, performs all the Functions more perfectly, and as is usually said, *In medio consistit Virtus*: But above all, she must not be with Child. Let her be of a sanguine Complexion, which may be known by her Vermilion Colour; not altogether so red, but inclining to white; of a firm Flesh, not soft. She must not likewise have her Courses, for that's a Sign that her Blood is too hot, either because her Temperament is such, or from some amorous Passion or otherways. Neither must she be subject

to

to the Whites, for ſuch Superfluities are a Sign of a bad Habit. She muſt not be red-hair'd, nor mark'd with red Spots; but her Hair muſt be black, or of a Cheſnut brown: ſhe muſt be well ſhap'd, neat in her Clothes, and comely in her Face, having a ſprightly Eye, and a ſmiling Countenance. She muſt have good Eyes, ſound and white Teeth, not having any rotten or ſpoil'd, leſt her Breath ſhould ſmell. She ought to have a ſweet Voice to pleaſe and rejoice the Child, and likewiſe ought to have a clear and free Pronunciation, that he may not learn an ill Accent from her, as uſually red-hair'd have, and ſometimes alſo thoſe that are very black-hair'd and white Skins; for their Milk is hot, ſharp and ſtinking, and alſo of an ill Taſte. She muſt not have a ſtrong Breath, as they who have a ſtinking Noſe, and bad Teeth, as we have ſaid before; becauſe the Nurſe that conſtantly kiſſes the Child, would infect its Lungs by often drawing in her corrupted Breath. Her Breaſts ought to be pretty big, to receive and concoct there a ſufficient Quantity of Milk, but not big to Exceſs; they muſt be ſound and free from Scars proceeding from former Impoſthumes; they muſt be indifferent firm and fleſhy, and not flaggy and hanging, that their natural Heat may be the ſtronger. The Nurſe muſt be broad-breaſted, that her Milk may have more place to be prepar'd and digeſted in, and becauſe 'tis a Sign of abundance of vital Heat. As to the Nipples, they muſt be well-ſhap'd, that is, not too big, nor too hard, nor griſly, nor ſunk in too deep; but they muſt be a little rais'd, and of a moderate Bigneſs and Firmneſs, well perforated with many little Holes, to be ſoft milch'd, that the Child may not take too much Pains to draw the Milk, by ſucking and preſſing them with its Mouth.

If a Nurſe hath all theſe recited good Qualities reſpecting all the Parts of her Body, there is Reaſon to preſume her Milk will be well-condition'd: which may be known firſt by its Quantity, which ought to be

sufficient for the Child's Nourishment; nor must it be too much, lest that not being all drawn forth, it curdles and inflames the Breast by its too long Stay there: but however, it is better to have too much than too little, for she may give the Overplus to another Child. It must be of a middle Consistence, neither too wateriſh nor too thick; which may be easily judg'd, if the Nurse milking some into her Hand, and turning it a little on one side, it immediately runs off; but if it remains fixt, without running by the turning of the Hand, 'tis a Mark it is too thick and viscous: The good is of a Consistence between both, which slides off gently in proportion to the turning of the Hand, leaving the Place whence it slid a little stain'd. As to the Colour, the whitest is the best, and the lesser white it is, so much the worse. It must be of a sweet and pleasant Smell, which is a Testimony of a good Temperament, as may be seen in red-hair'd Women, whose Milk hath a sour, stinking, and bad Scent; and to be compleat in every Quality, it must be well tasted, that is, sweet and sugar'd, without any Acrimony or other strange Taste.

We must not forget the principal and best Conditions of a Nurse, which consists in her good Manners: wherefore let her be vigilant and careful to cleanse the Child as soon as there is occasion; let her be wise and prudent, nor subject to Choler, nor quarrelsome; as well because in the beginning it may make bad Impressions on the Child, as because this Passion doth extraordinarily heat the Milk. She must not be melancholy, but merry and chearful, smiling often to divert it. She must be sober, and not given to Wine, and yet less to the Excess of *Venus*; but she may moderately use the first, and not totally abstain from the second, if her Nature require it, provided it be with her Husband: which Liberty is freely given them by *Jubertus*, in his 7th Chapter of his fifth Book of *Popular Errors*, founded upon the Experience of all poor Women, who bring up

up their Children very well, notwithſtanding they lie every Night with their Husbands; and of his own alledging, that his Wife had nurs'd his Children all very well, altho' he lay with her every Night, and careſs'd her (as he ſaid) like a good and faithful Husband; but ſhe muſt forbear, at leaſt an Hour or two after, to give the Child ſuck.

If a Nurſe hath all or moſt part of theſe Conditions here ſpecify'd, as well reſpecting her Perſon as Manners, and that ſhe maintains this Condition by a Diet fit for the Child's Temperament, and not contrary to her own, there is then great Reaſon to believe ſhe is fit to make a very good Nurſe, and to bring up in perfect Health the Son of a Prince.

In fine, *Loving Reader*, I believe I have now acquitted my ſelf of my Duty towards the Publick, in communicating the Knowledge which God hath graciouſly beſtow'd on me concerning the Diſeaſes of Women with Child, and in Childbed. I pray God, the Fountain of all Science, that he will vouchſafe to teach you the right way of helping them, and their Children, in theſe Caſes; and make you yet better able to conceive theſe things, than I have here explain'd them; and that all may be for ever to his greater Glory.

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